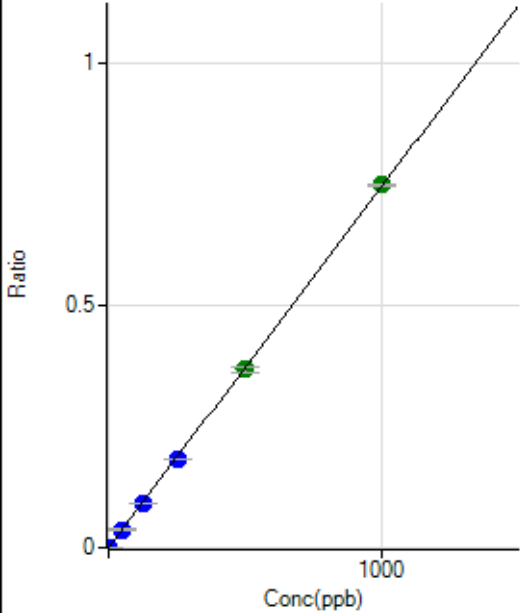


Calibration for 007CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7111324MS5.b\
 Analysis File: P7111324MS5.batch.bin
 DA Date-Time: 2024-11-13 20:35:53
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2024-11-13 16:25:45
2	006CALS.d	S02	2024-11-13 16:32:18
3	007CALS.d	S03	2024-11-13 16:35:33
4	008CALS.d	S04	2024-11-13 16:38:28
5	009CALS.d	S05	2024-11-13 16:41:11
6	010CALS.d	S06	2024-11-13 16:43:59
7	011CALS.d	S07	2024-11-13 16:46:43
8	012CALS.d	S08	2024-11-13 16:49:29

9 Be [No Gas] ISTD:6 Li [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	66.67	0.0000	P	44.
2	☐	1.000	1.055	2778.06	0.0008	P	4.1
3	☐	50.000	50.131	136661.57	0.0374	P	3.0
4	☐	125.000	123.946	341706.69	0.0925	P	1.3
5	☐	250.000	244.030	658678.12	0.1821	P	0.8
6	☐	500.000	493.010	1334222.92	0.3678	A	2.5
7	☐	1000.000	1005.113	2546931.60	0.7498	A	0.6
8	☐			292.60	0.0001	P	34.

$y = 7.4597E-004 * x + 1.9820E-005$

$R = 0.9999$

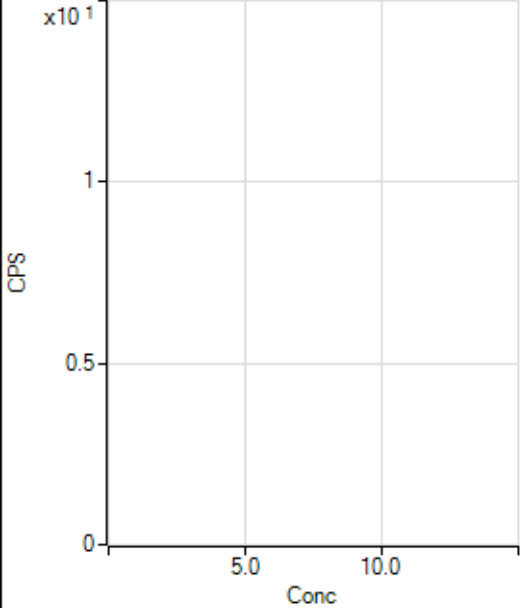
$DL = 0.03541$

$BEC = 0.02657$

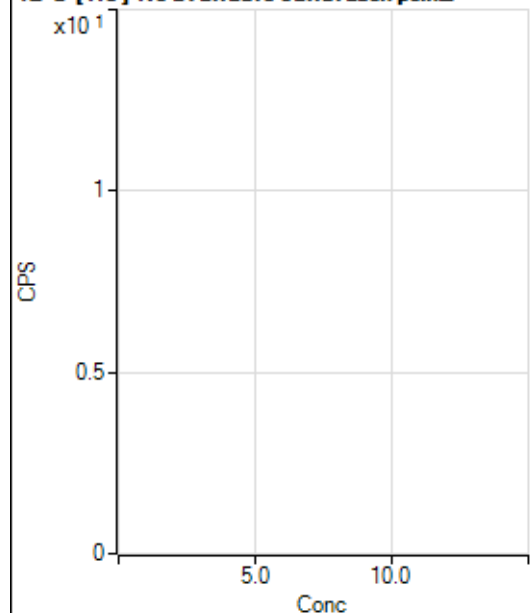
Weight: <None>

Min Conc: 0

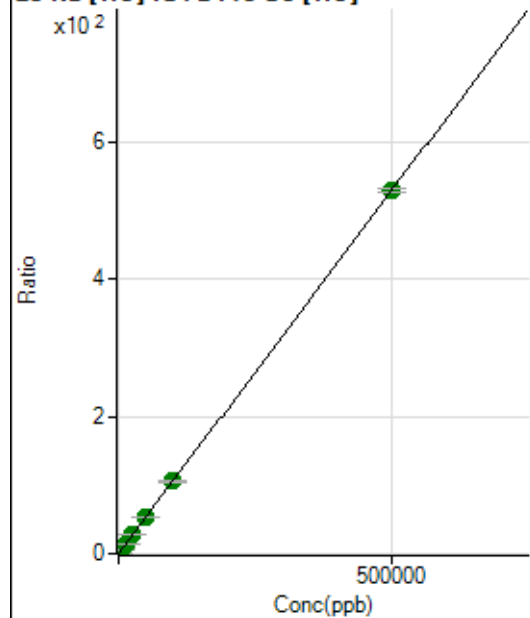
12 C [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

23 Na [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	68682.13	0.0506	P	2.8
2	☐	500.000	486.687	770736.31	0.5653	P	1.0
3	☐	5000.000	5112.322	7415881.76	5.4571	A	2.9
4	☐	12500.000	12810.494	18068598.06	13.5982	A	0.7
5	☐	25000.000	25680.443	35299585.31	27.2086	A	1.4
6	☐	50000.000	51112.121	69379525.63	54.1035	A	0.5
7	☐	100000.00	100173.03	136170756.86	105.9873	A	2.0
8	☐	500000.00	499811.28	629278332.85	528.6195	A	1.2

$$y = 0.0011 * x + 0.0506$$

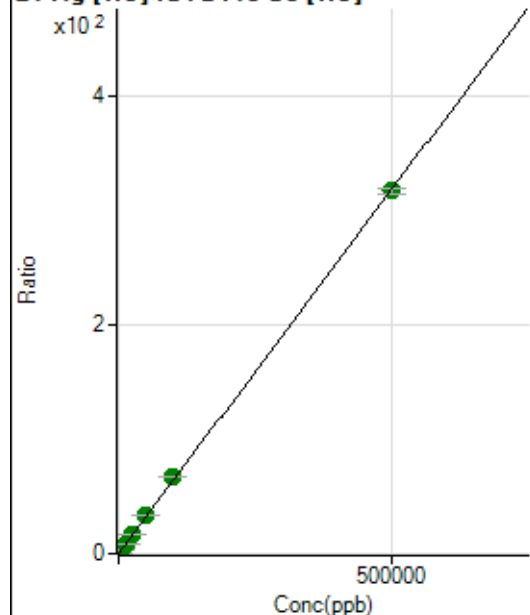
$$R = 1.0000$$

$$DL = 3.969$$

$$BEC = 47.83$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3103.68	0.0023	P	2.5
2	☐	500.000	517.369	451269.36	0.3310	P	0.9
3	☐	5000.000	5362.164	4632675.66	3.4088	A	2.3
4	☐	12500.000	13410.925	11323617.61	8.5220	A	0.3
5	☐	25000.000	26787.958	22080254.39	17.0202	A	0.4
6	☐	50000.000	52890.513	43088566.58	33.6027	A	1.1
7	☐	100000.00	105863.76	86416524.27	67.2557	A	1.2
8	☐	500000.00	498422.38	376938576.61	316.6414	A	1.6

$$y = 6.3528\text{E-}004 * x + 0.0023$$

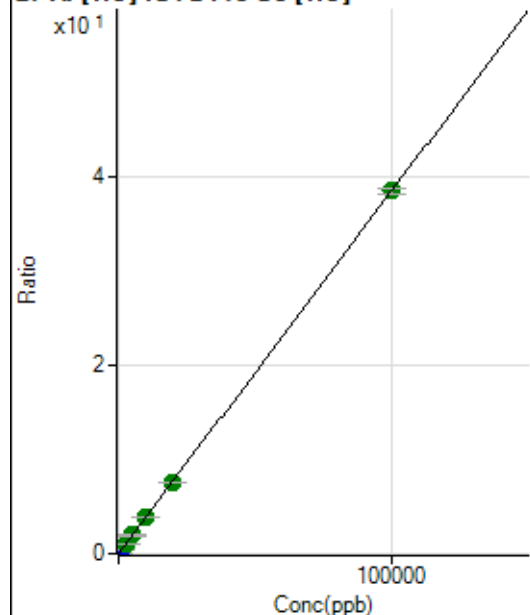
$$R = 0.9999$$

$$DL = 0.2734$$

$$BEC = 3.597$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	451.12	0.0003	P	12.
2	☐	20.000	19.456	10635.99	0.0078	P	3.3
3	☐	1000.000	1010.786	527777.78	0.3883	P	2.1
4	☐	2500.000	2510.947	1281147.44	0.9642	A	0.7
5	☐	5000.000	5063.744	2522203.37	1.9441	A	1.4
6	☐	10000.000	9923.631	4885275.83	3.8096	A	1.0
7	☐	20000.000	19567.259	9651198.95	7.5114	A	1.5
8	☐	100000.00	100090.61	45737239.32	38.4209	A	1.6

$$y = 3.8386\text{E-}004 * x + 3.3255\text{E-}004$$

$$R = 1.0000$$

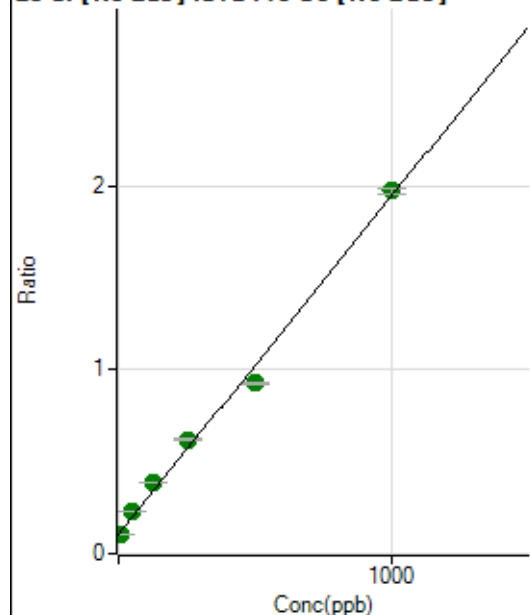
$$DL = 0.3147$$

$$BEC = 0.8663$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD :45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1802033.10	0.1049	A	1.7
2	☐	10.000	0.642	1848441.78	0.1061	A	1.6
3	☐	50.000	67.279	3926745.01	0.2288	A	0.7
4	☐	125.000	151.890	6447270.81	0.3847	A	0.4
5	☐	250.000	279.835	9987218.81	0.6203	A	0.8
6	☐	500.000	446.631	14769078.39	0.9274	A	1.7
7	☐	1000.000	1015.094	31070990.09	1.9743	A	1.4
8	☐			1698913.54	0.1177	A	8.8

$$y = 0.0018 * x + 0.1049$$

$$R = 0.9969$$

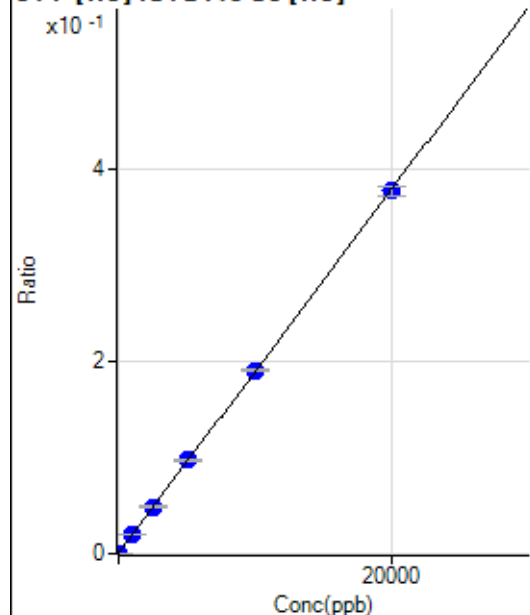
$$DL = 2.861$$

$$BEC = 56.99$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD :45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-16.868	241.12	0.0002	P	9.5
2	☐	0.000	16.868	1112.27	0.0008	P	1.7
3	☐	1000.000	1035.568	27306.71	0.0201	P	1.9
4	☐	2500.000	2562.632	65091.03	0.0490	P	0.5
5	☐	5000.000	5122.124	126381.73	0.0974	P	1.2
6	☐	10000.000	10064.221	244835.65	0.1909	P	0.7
7	☐	20000.000	19927.751	485071.39	0.3776	P	2.4
8	☐			452.23	0.0004	P	7.0

$$y = 1.8922E-005 * x + 4.9652E-004$$

$$R = 1.0000$$

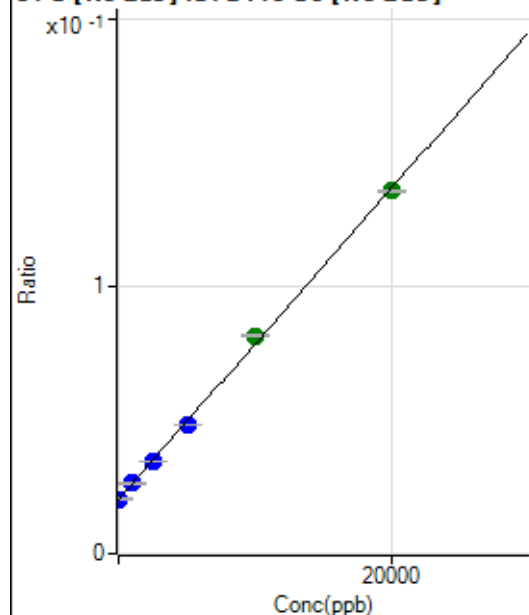
$$DL = 2.44$$

$$BEC = 26.24$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-19.425	346550.36	0.0202	P	1.0
2	☐	0.000	19.425	355474.70	0.0204	P	0.9
3	☐	1000.000	1029.434	450998.30	0.0263	P	0.6
4	☐	2500.000	2430.689	577143.11	0.0344	P	0.2
5	☐	5000.000	4762.029	772744.54	0.0480	P	0.6
6	☐	10000.000	10494.785	1295337.43	0.0813	A	0.9
7	☐	20000.000	19819.292	2133648.63	0.1356	A	0.5
8	☐			267389.25	0.0185	P	8.6

$$y = 5.8162E-006 * x + 0.0203$$

R = 0.9995

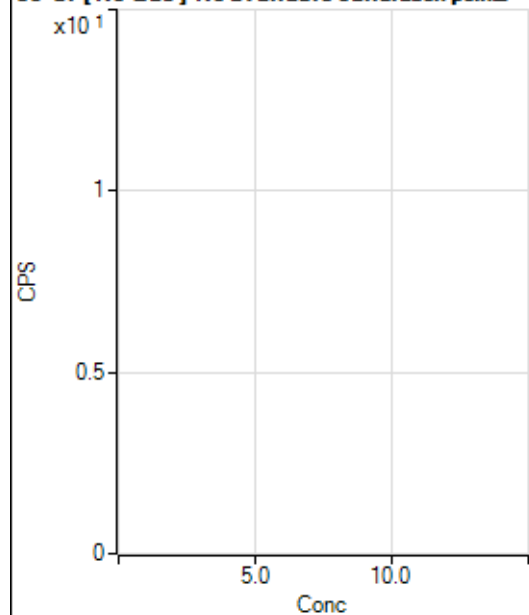
DL = 95.81

BEC = 3490

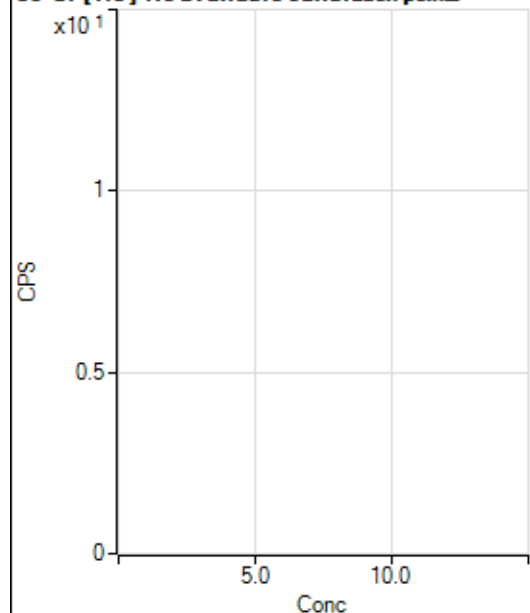
Weight: <None>

Min Conc: 0

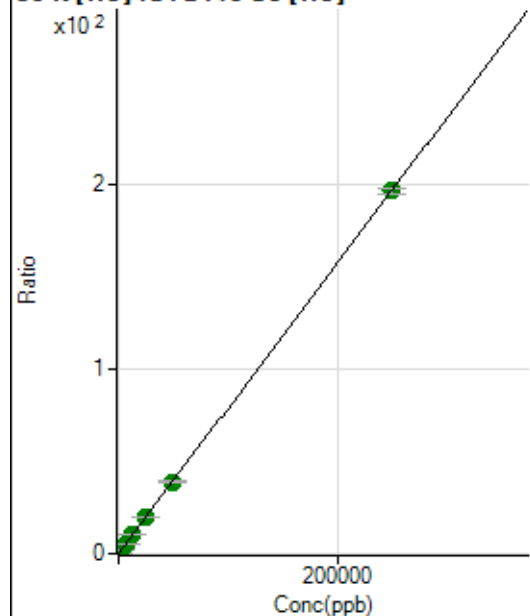
35 Cl [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

39 K [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	83819.04	0.0617	P	1.6
2	☐	500.000	534.396	657248.08	0.4820	P	0.4
3	☐	2500.000	2559.811	2819806.69	2.0750	A	2.9
4	☐	6250.000	6256.114	6620147.89	4.9822	A	1.0
5	☐	12500.000	12560.387	12896243.98	9.9406	A	0.5
6	☐	25000.000	24726.875	25018220.18	19.5096	A	0.4
7	☐	50000.000	49600.370	50197493.70	39.0728	A	2.4
8	☐	250000.00	250103.39	234238996.51	196.7700	A	1.2

$$y = 7.8651\text{E-}004 * x + 0.0617$$

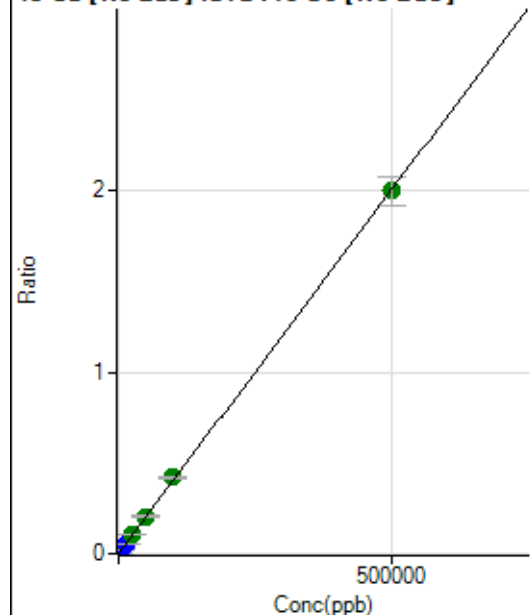
$$R = 1.0000$$

$$DL = 3.856$$

$$BEC = 78.48$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	834.48	0.0000	P	7.2
2	☐	500.000	552.763	39386.61	0.0023	P	1.3
3	☐	5000.000	5613.600	386449.79	0.0225	P	1.3
4	☐	12500.000	13631.388	915414.36	0.0546	P	0.7
5	☐	25000.000	26285.931	1695073.20	0.1053	A	1.1
6	☐	50000.000	51258.604	3268256.10	0.2052	A	2.1
7	☐	100000.00	105005.01	6616150.66	0.4204	A	1.2
8	☐	500000.00	498774.36	28847212.07	1.9967	A	7.7

$$y = 4.0031\text{E-}006 * x + 4.8594\text{E-}005$$

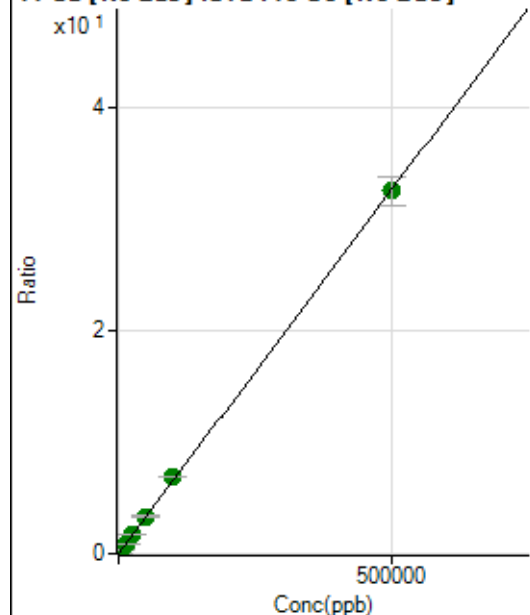
$$R = 0.9999$$

$$DL = 2.631$$

$$BEC = 12.14$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61258.06	0.0036	P	0.5
2	☐	500.000	548.559	685384.50	0.0394	P	1.3
3	☐	5000.000	5435.413	6145829.28	0.3581	A	1.3
4	☐	12500.000	13118.081	14402260.90	0.8593	A	0.8
5	☐	25000.000	26177.797	27552540.98	1.7112	A	0.3
6	☐	50000.000	51474.996	53526259.20	3.3614	A	2.1
7	☐	100000.00	104885.31	107732647.29	6.8454	A	0.9
8	☐	500000.00	498796.69	470115890.77	32.5409	A	7.7

$$y = 6.5232\text{E-}005 * x + 0.0036$$

$$R = 0.9999$$

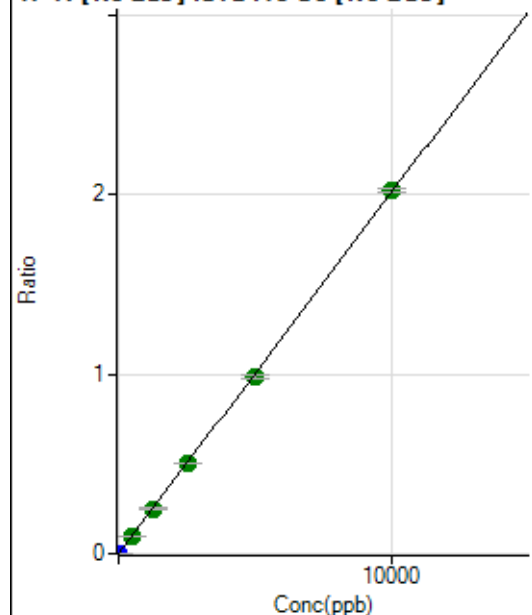
$$DL = 0.84$$

$$BEC = 54.69$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2202.41	0.0001	P	4.7
2	☐	5.000	4.955	19607.19	0.0011	P	1.4
3	☐	500.000	499.988	1729027.06	0.1008	A	0.9
4	☐	1250.000	1249.075	4215664.73	0.2515	A	1.0
5	☐	2500.000	2510.704	8138179.18	0.5054	A	1.3
6	☐	5000.000	4907.817	15730649.62	0.9879	A	2.4
7	☐	10000.000	10043.532	31814280.36	2.0215	A	1.0
8	☐			2672.49	0.0002	P	8.4

$$y = 2.0126E-004 * x + 1.2828E-004$$

R = 0.9999

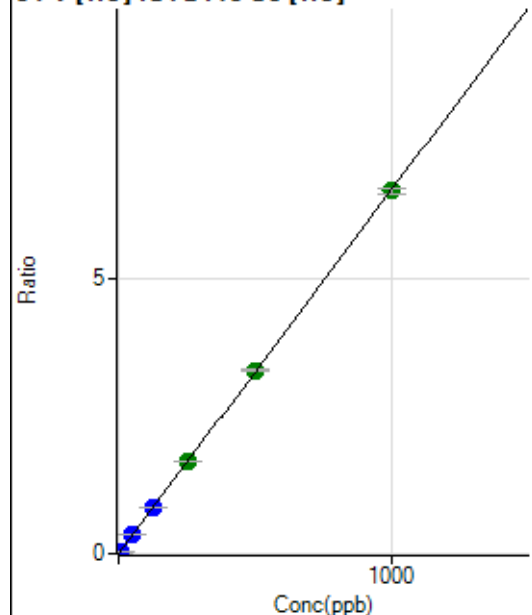
DL = 0.09069

BEC = 0.6374

Weight: <None>

Min Conc: 0

51 V [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30.00	0.0000	P	18.
2	☐	5.000	5.227	47137.97	0.0346	P	1.0
3	☐	50.000	50.826	456631.77	0.3360	P	2.4
4	☐	125.000	125.277	1100413.89	0.8282	P	0.2
5	☐	250.000	253.264	2171885.47	1.6742	A	1.3
6	☐	500.000	503.419	4267351.01	3.3278	A	0.7
7	☐	1000.000	997.397	8471371.26	6.5932	A	1.4
8	☐			1286.74	0.0011	P	6.0

$$y = 0.0066 * x + 2.2076E-005$$

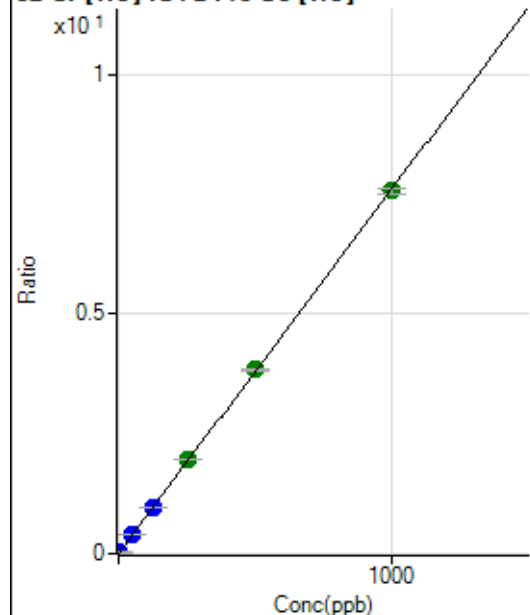
R = 1.0000

DL = 0.001896

BEC = 0.00334

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5153.15	0.0038	P	3.7
2	☐	2.000	2.143	27394.98	0.0201	P	0.4
3	☐	50.000	51.728	539737.87	0.3971	P	1.7
4	☐	125.000	126.732	1285446.68	0.9674	P	0.6
5	☐	250.000	256.952	2539558.40	1.9576	A	0.8
6	☐	500.000	503.940	4918422.98	3.8355	A	0.7
7	☐	1000.000	995.989	9735000.76	7.5769	A	1.6
8	☐			29197.86	0.0245	P	4.0

$$y = 0.0076 * x + 0.0038$$

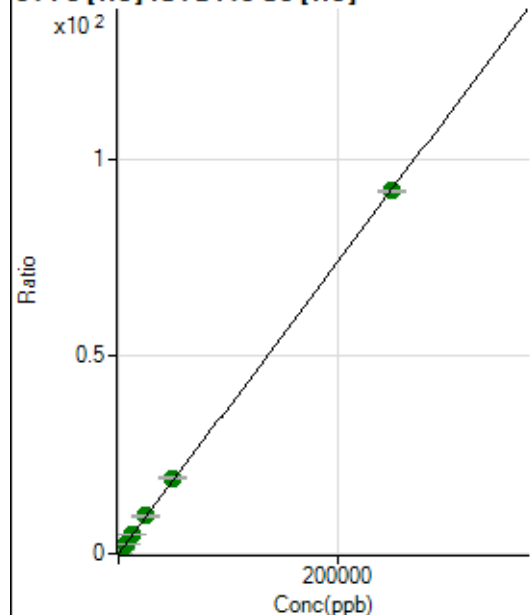
$$R = 1.0000$$

$$DL = 0.05614$$

$$BEC = 0.4992$$

Weight: <None>

Min Conc: 0

54 Fe [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6215.77	0.0046	P	1.2
2	☐	50.000	57.619	35212.30	0.0258	P	1.8
3	☐	2500.000	2730.459	1375075.41	1.0116	A	1.1
4	☐	6250.000	6652.890	3266276.69	2.4582	A	1.5
5	☐	12500.000	13325.463	6381442.68	4.9190	A	0.2
6	☐	25000.000	25910.023	12258959.68	9.5602	A	1.1
7	☐	50000.000	52070.451	24678061.85	19.2082	A	2.0
8	☐	250000.00	249441.25	109518860.59	91.9985	A	0.8

$$y = 3.6880E-004 * x + 0.0046$$

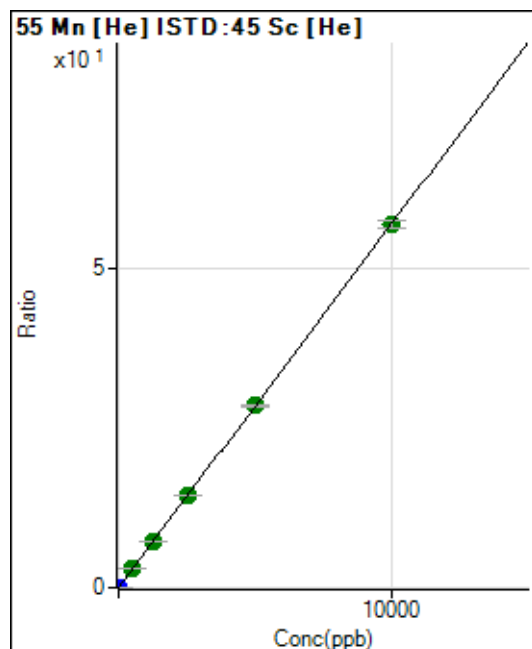
$$R = 1.0000$$

$$DL = 0.446$$

$$BEC = 12.41$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	974.49	0.0007	P	4.1
2	☐	1.000	1.057	9208.45	0.0068	P	1.3
3	☐	500.000	520.611	4041870.11	2.9741	A	2.3
4	☐	1250.000	1265.335	9603349.44	7.2273	A	0.7
5	☐	2500.000	2547.792	18878168.75	14.5518	A	1.0
6	☐	5000.000	5019.461	36761200.01	28.6680	A	1.1
7	☐	10000.000	9975.374	73196426.13	56.9724	A	2.1
8	☐			33452.67	0.0281	P	1.9

$$y = 0.0057 * x + 7.1784E-004$$

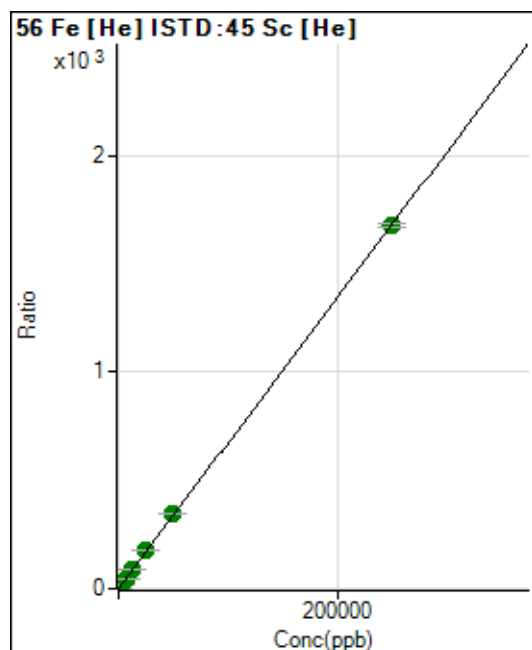
$$R = 1.0000$$

$$DL = 0.01537$$

$$BEC = 0.1257$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	68627.90	0.0505	P	2.1
2	☐	50.000	56.315	583935.15	0.4283	P	0.4
3	☐	2500.000	2689.809	24588293.24	18.0919	A	2.1
4	☐	6250.000	6637.743	59224904.67	44.5720	A	0.4
5	☐	12500.000	13165.774	114622460.52	88.3575	A	1.1
6	☐	25000.000	26011.980	223790941.11	174.5211	A	1.1
7	☐	50000.000	51600.873	444739926.71	346.1539	A	1.8
8	☐	250000.00	249533.74	1992492556.9	1,673.752	A	0.9

$$y = 0.0067 * x + 0.0505$$

$$R = 1.0000$$

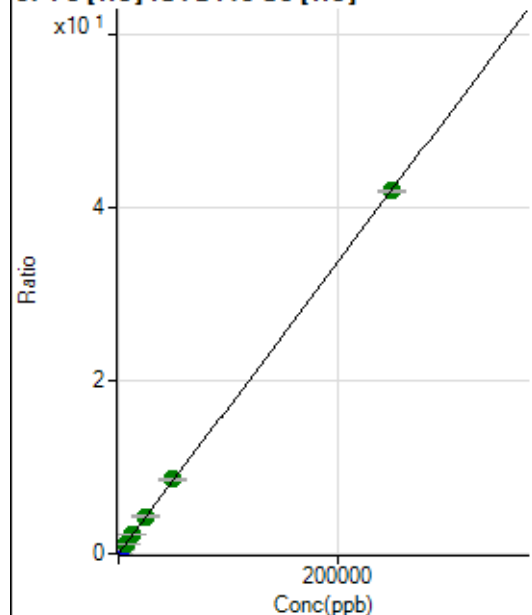
$$DL = 0.4814$$

$$BEC = 7.535$$

Weight: <None>

Min Conc: 0

57 Fe [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2992.54	0.0022	P	2.5
2	☐	50.000	58.303	16371.22	0.0120	P	1.0
3	☐	2500.000	2773.684	636793.65	0.4685	P	2.0
4	☐	6250.000	6577.369	1472321.11	1.1081	A	0.3
5	☐	12500.000	13057.118	2850703.02	2.1975	A	1.2
6	☐	25000.000	25780.108	5561130.61	4.3366	A	0.3
7	☐	50000.000	51046.888	11029940.25	8.5847	A	1.5
8	☐	250000.00	249673.83	49974502.03	41.9797	A	0.4

$$y = 1.6813E-004 * x + 0.0022$$

$$R = 1.0000$$

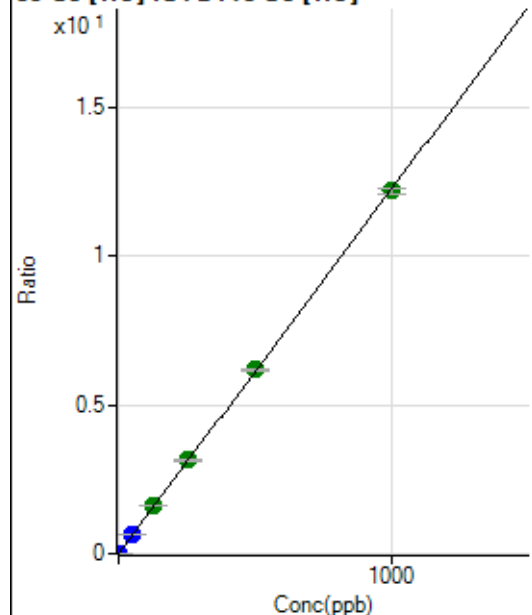
$$DL = 0.9831$$

$$BEC = 13.11$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	321.12	0.0002	P	8.9
2	☐	1.000	1.131	19195.69	0.0141	P	0.4
3	☐	50.000	52.787	878128.21	0.6461	P	1.9
4	☐	125.000	131.126	2132128.58	1.6046	A	0.8
5	☐	250.000	256.036	4064275.35	3.1329	A	0.7
6	☐	500.000	504.540	7916460.37	6.1735	A	0.5
7	☐	1000.000	995.316	15647181.99	12.1783	A	1.5
8	☐			36878.62	0.0310	P	0.2

$$y = 0.0122 * x + 2.3670E-004$$

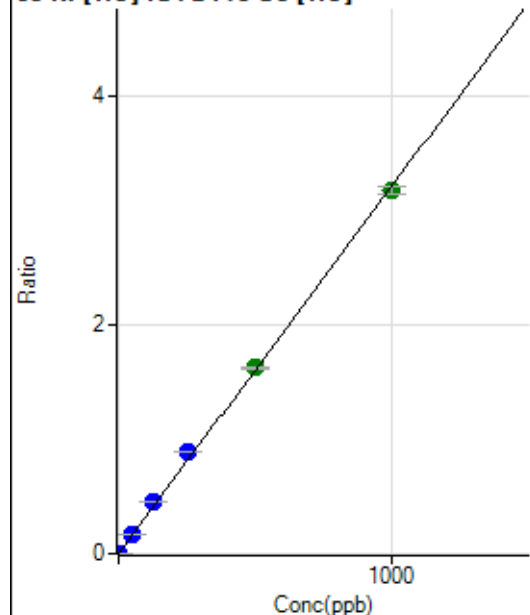
$$R = 1.0000$$

$$DL = 0.00516$$

$$BEC = 0.01935$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1287.85	0.0009	P	7.5
2	☐	1.000	1.078	6007.94	0.0044	P	2.4
3	☐	50.000	52.512	230240.63	0.1694	P	2.8
4	☐	125.000	141.048	602551.20	0.4535	P	0.6
5	☐	250.000	275.466	1147751.81	0.8847	P	0.2
6	☐	500.000	506.359	2084398.72	1.6255	A	0.9
7	☐	1000.000	988.323	4075013.93	3.1718	A	2.0
8	☐			15387.99	0.0129	P	0.4

$$y = 0.0032 * x + 9.4879E-004$$

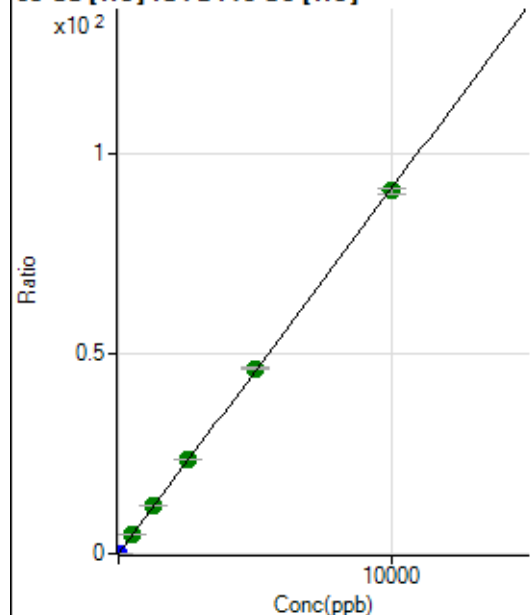
$$R = 0.9995$$

$$DL = 0.06654$$

$$BEC = 0.2957$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2251.30	0.0017	P	0.8
2	☐	2.000	2.037	27605.59	0.0202	P	1.1
3	☐	500.000	531.768	6598764.90	4.8553	A	2.1
4	☐	1250.000	1302.758	15802249.35	11.8925	A	1.1
5	☐	2500.000	2578.298	30530902.60	23.5348	A	1.3
6	☐	5000.000	5075.933	59410469.67	46.3318	A	1.3
7	☐	10000.000	9934.276	116501679.37	90.6759	A	1.8
8	☐			25384.92	0.0213	P	1.2

$$y = 0.0091 * x + 0.0017$$

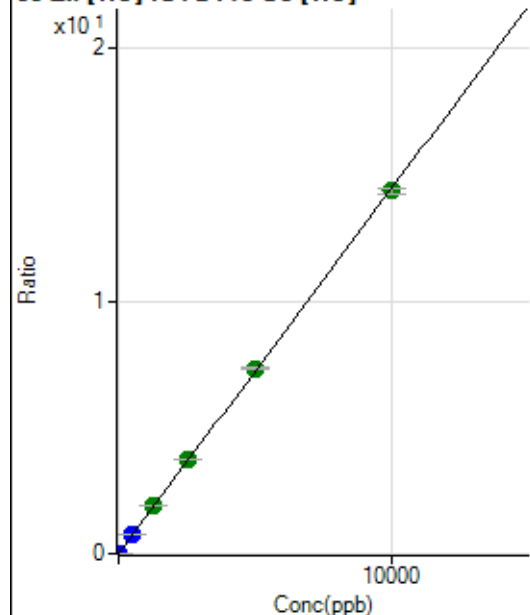
$$R = 0.9999$$

$$DL = 0.004246$$

$$BEC = 0.1816$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2778.07	0.0020	P	2.0
2	☐	2.000	5.425	13469.54	0.0099	P	1.4
3	☐	500.000	534.970	1052503.03	0.7745	P	2.5
4	☐	1250.000	1304.861	2506164.01	1.8861	A	1.7
5	☐	2500.000	2582.829	4840540.31	3.7313	A	1.1
6	☐	5000.000	5066.510	9383049.93	7.3174	A	1.3
7	☐	10000.000	9937.431	18437337.22	14.3503	A	1.8
8	☐			14025.57	0.0118	P	0.8

$$y = 0.0014 * x + 0.0020$$

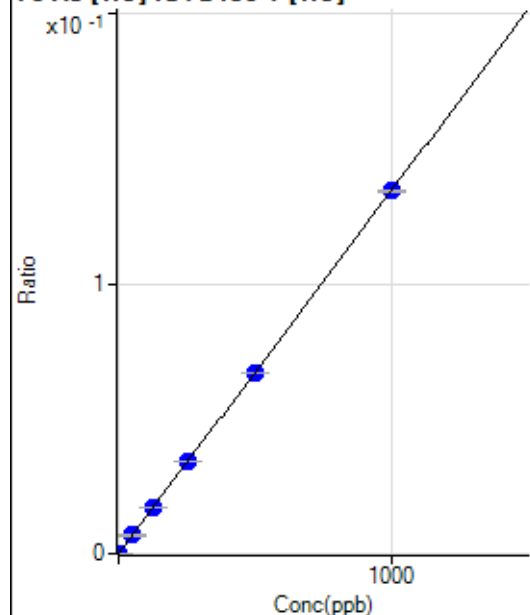
$$R = 0.9999$$

$$DL = 0.0829$$

$$BEC = 1.417$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	14.45	0.0000	P	73.
2	☐	1.000	1.116	1555.65	0.0002	P	0.2
3	☐	50.000	50.502	70029.70	0.0068	P	1.8
4	☐	125.000	126.464	167765.31	0.0170	P	1.0
5	☐	250.000	253.656	326155.04	0.0341	P	0.5
6	☐	500.000	499.404	637792.03	0.0672	P	0.3
7	☐	1000.000	999.176	1273321.55	0.1344	P	0.2
8	☐			652.24	0.0001	P	5.4

$$y = 1.3451E-004 * x + 1.4291E-006$$

$$R = 1.0000$$

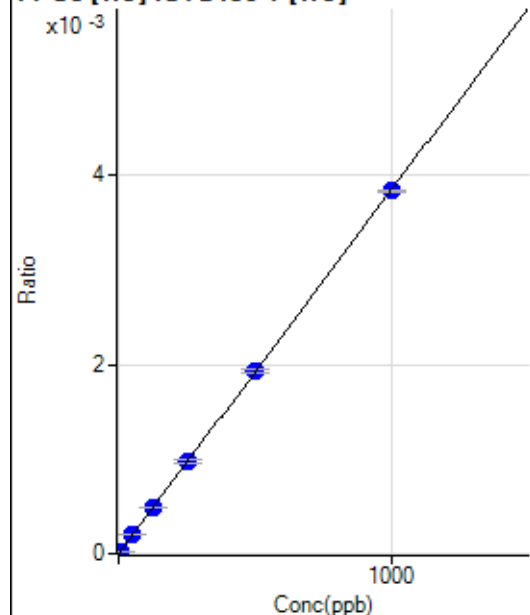
$$DL = 0.02352$$

$$BEC = 0.01062$$

Weight: <None>

Min Conc: 0

77 Se [He] ISTD:89 Y [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.647	183.33	0.0000	P	19.
3	☐	50.000	51.234	2030.16	0.0002	P	1.7
4	☐	125.000	127.136	4818.61	0.0005	P	1.9
5	☐	250.000	254.092	9334.11	0.0010	P	3.2
6	☐	500.000	503.199	18360.36	0.0019	P	1.8
7	☐	1000.000	997.051	36304.36	0.0038	P	0.4
8	☐			6.66	0.0000	P	86.

$$y = 3.8432\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 1.0000$$

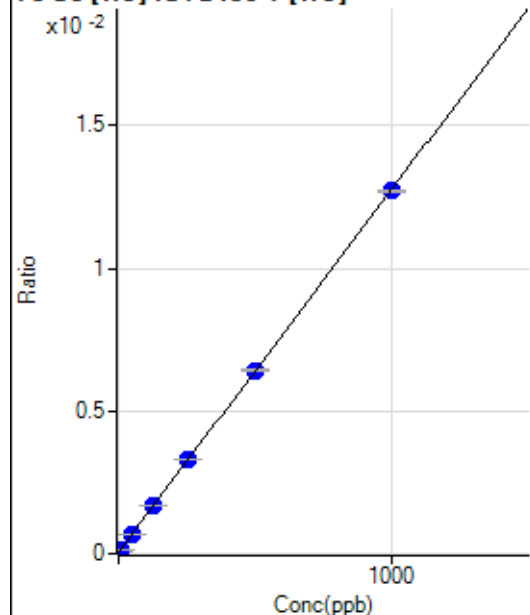
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	542.24	0.0001	P	1.4
2	☐	5.000	5.627	1285.62	0.0001	P	7.1
3	☐	50.000	50.852	7210.71	0.0007	P	1.5
4	☐	125.000	129.763	16781.82	0.0017	P	1.4
5	☐	250.000	256.867	31693.93	0.0033	P	1.1
6	☐	500.000	502.226	61066.29	0.0064	P	0.4
7	☐	1000.000	996.529	120408.59	0.0127	P	0.3
8	☐			523.35	0.0001	P	7.5

$$y = 1.2699\text{E-}005 * x + 5.3777\text{E-}005$$

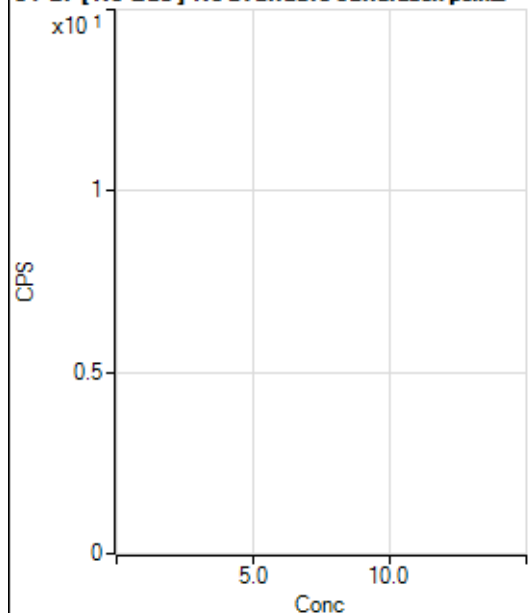
$$R = 1.0000$$

$$DL = 0.1762$$

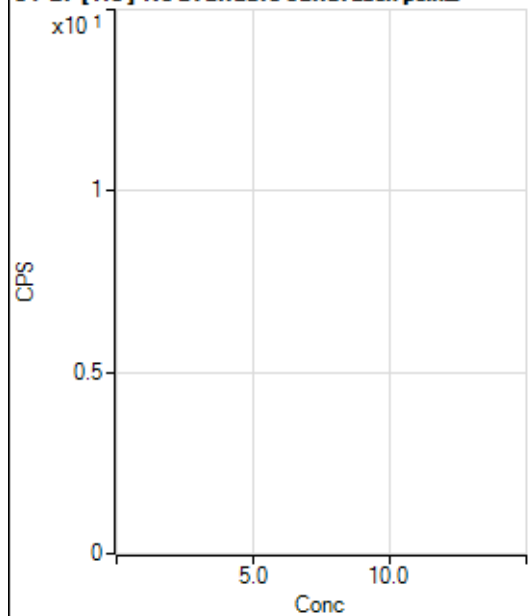
$$BEC = 4.235$$

Weight: <None>

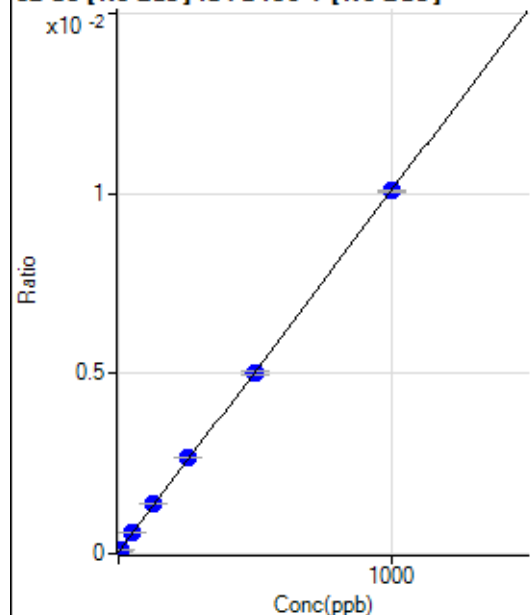
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16082.22		P	0.8
2	☐			16449.23		P	2.0
3	☐			16721.79		P	2.2
4	☐			15958.72		P	1.7
5	☐			14919.85		P	2.2
6	☐			14601.75		P	1.8
7	☐			14625.13		P	0.5
8	☐			16060.00		P	3.5

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			154.45		P	17.
2	☐			153.33		P	16.
3	☐			126.67		P	7.0
4	☐			130.00		P	17.
5	☐			130.00		P	6.8
6	☐			114.45		P	6.7
7	☐			142.23		P	15.
8	☐			277.78		P	10.

82 Se [No Gas] ISTD:89 Y [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1779.39	0.0000	P	4.2
2	☐	5.000	5.556	4142.27	0.0001	P	1.0
3	☐	50.000	53.779	23925.49	0.0006	P	1.4
4	☐	125.000	132.489	55012.00	0.0014	P	0.4
5	☐	250.000	259.705	103238.75	0.0027	P	0.2
6	☐	500.000	494.466	196906.10	0.0050	P	2.7
7	☐	1000.000	999.213	389055.64	0.0101	P	0.3
8	☐			1835.20	0.0001	P	3.8

$$y = 1.0035E-005 * x + 4.3884E-005$$

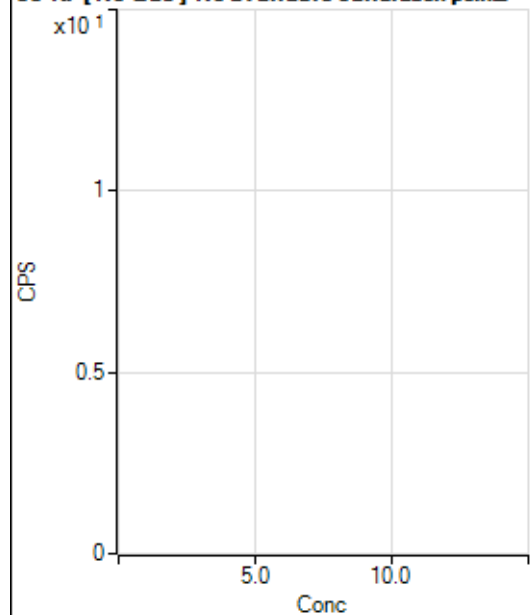
R = 0.9999

DL = 0.555

BEC = 4.373

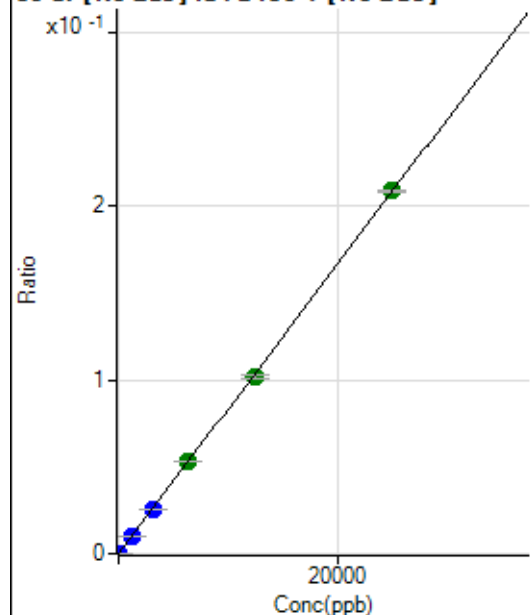
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			372.23		P	2.7
2	☐			388.90		P	7.3
3	☐			343.34		P	10.
4	☐			353.34		P	7.5
5	☐			356.67		P	7.4
6	☐			335.56		P	19.
7	☐			412.23		P	13.
8	☐			407.79		P	2.6

86 Sr [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	672.25	0.0000	P	5.4
2	☐	1.000	25.668	9569.86	0.0002	P	2.6
3	☐	1250.000	1252.449	428062.91	0.0104	P	1.2
4	☐	3125.000	3106.256	1036211.36	0.0259	P	0.5
5	☐	6250.000	6344.018	2057662.80	0.0528	A	0.6
6	☐	12500.000	12232.152	4005847.58	0.1018	A	1.9
7	☐	25000.000	25112.639	8075154.95	0.2090	A	0.7
8	☐			21258.75	0.0006	P	7.5

$$y = 8.3230\text{E-}006 * x + 1.6580\text{E-}005$$

R = 0.9999

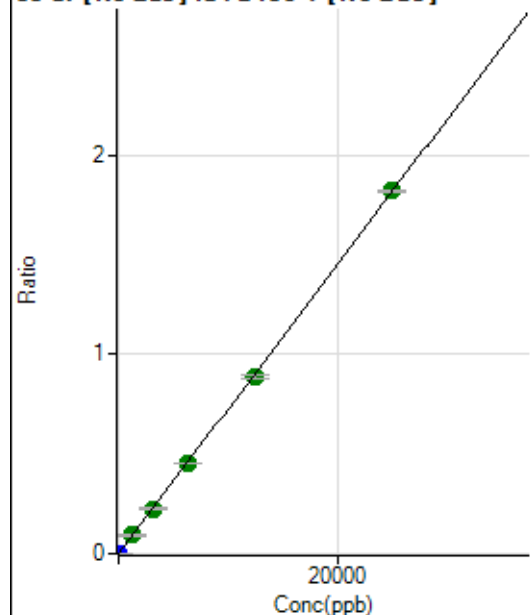
DL = 0.3215

BEC = 1.992

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	562.24	0.0000	P	8.2
2	☐	1.000	25.437	77201.21	0.0019	P	0.6
3	☐	1250.000	1265.634	3760373.41	0.0917	A	1.1
4	☐	3125.000	3128.925	9081330.56	0.2267	A	0.7
5	☐	6250.000	6288.614	17751947.79	0.4557	A	0.4
6	☐	12500.000	12228.881	34855073.37	0.8861	A	2.6
7	☐	25000.000	25124.633	70328675.62	1.8205	A	0.5
8	☐			180488.75	0.0052	P	7.0

$$y = 7.2457\text{E-}005 * x + 1.3867\text{E-}005$$

R = 0.9999

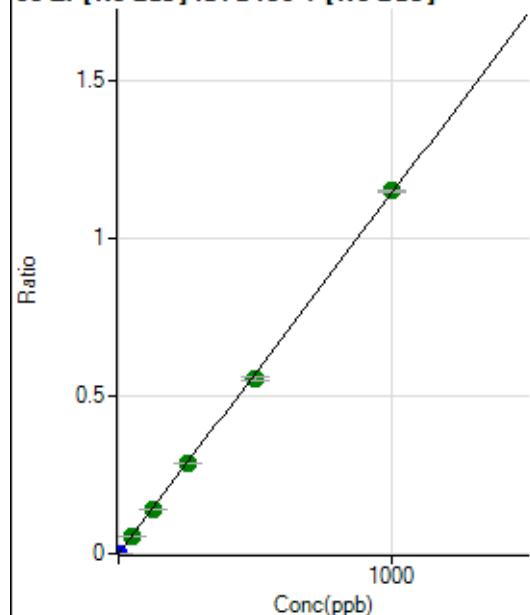
DL = 0.04682

BEC = 0.1914

Weight: <None>

Min Conc: 0

90 Zr [No Gas] ISTD: 89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3832.76	0.0001	P	0.6
2	☐	1.000	0.986	50759.51	0.0012	P	1.0
3	☐	50.000	49.627	2328505.59	0.0568	A	1.1
4	☐	125.000	124.074	5682121.65	0.1419	A	0.7
5	☐	250.000	249.778	11121399.56	0.2855	A	0.1
6	☐	500.000	486.596	21871650.51	0.5560	A	2.9
7	☐	1000.000	1006.892	44445302.67	1.1505	A	0.4
8	☐			31809.99	0.0009	P	5.5

$$y = 0.0011 * x + 9.4527E-005$$

$$R = 0.9999$$

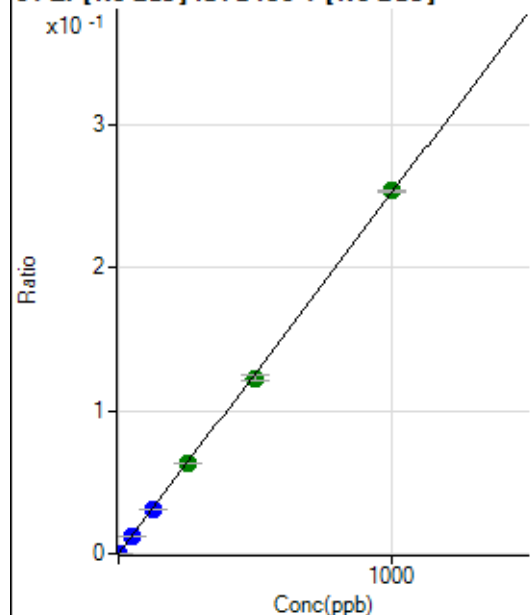
$$DL = 0.001472$$

$$BEC = 0.08274$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD: 89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	875.59	0.0000	P	9.0
2	☐	1.000	0.993	11296.65	0.0003	P	2.9
3	☐	50.000	49.685	514131.48	0.0125	P	1.1
4	☐	125.000	124.859	1260978.26	0.0315	P	0.3
5	☐	250.000	249.900	2453838.12	0.0630	A	1.0
6	☐	500.000	487.433	4831526.42	0.1228	A	3.0
7	☐	1000.000	1006.342	9796067.21	0.2536	A	0.8
8	☐			7031.74	0.0002	P	6.2

$$y = 2.5196E-004 * x + 2.1594E-005$$

$$R = 0.9999$$

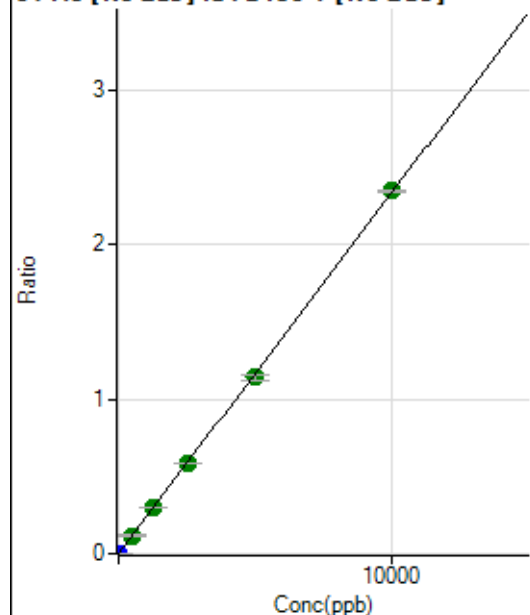
$$DL = 0.0232$$

$$BEC = 0.08571$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1488.98	0.0000	P	7.9
2	☐	5.000	5.779	57692.98	0.0014	P	0.8
3	☐	500.000	503.330	4825510.35	0.1177	A	1.2
4	☐	1250.000	1257.541	11776546.91	0.2940	A	0.8
5	☐	2500.000	2514.936	22904938.83	0.5879	A	0.4
6	☐	5000.000	4883.543	44904315.44	1.1416	A	3.0
7	☐	10000.000	10053.385	90790453.09	2.3502	A	0.2
8	☐			19566.49	0.0006	P	6.3

$$y = 2.3376E-004 * x + 3.6722E-005$$

$$R = 0.9999$$

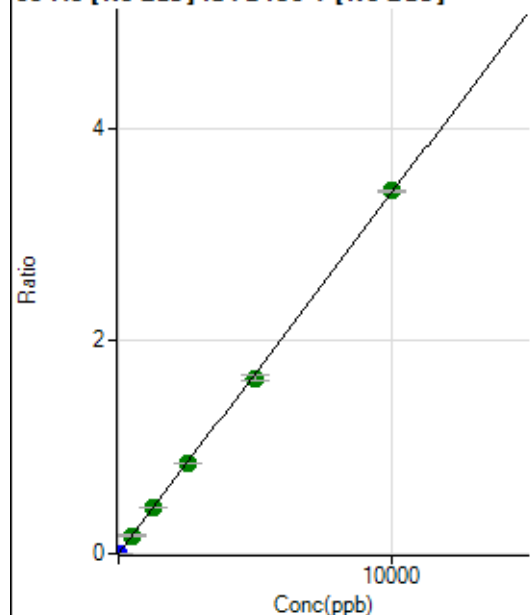
$$DL = 0.03747$$

$$BEC = 0.1571$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	93.34	0.0000	P	22.
2	☐	5.000	4.911	69397.74	0.0017	P	0.7
3	☐	500.000	504.932	7026513.02	0.1714	A	1.6
4	☐	1250.000	1263.596	17178468.08	0.4289	A	0.6
5	☐	2500.000	2523.735	33370591.72	0.8566	A	0.6
6	☐	5000.000	4871.804	65037037.92	1.6535	A	3.2
7	☐	10000.000	10056.218	131856288.03	3.4131	A	0.8
8	☐			13006.98	0.0004	P	7.6

$$y = 3.3941E-004 * x + 2.3016E-006$$

$$R = 0.9999$$

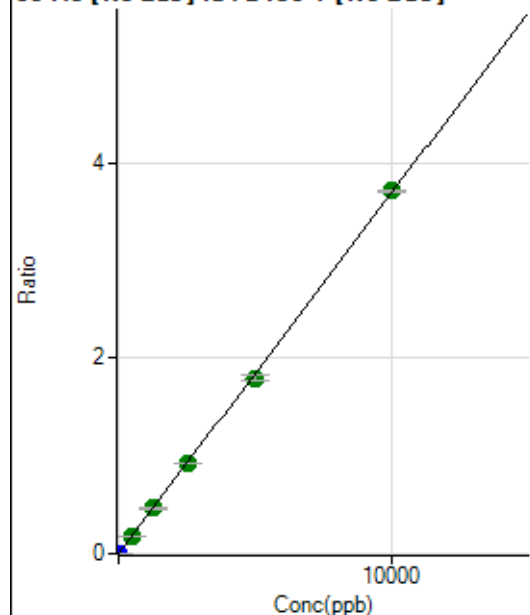
$$DL = 0.004513$$

$$BEC = 0.006781$$

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	383.34	0.0000	P	3.8
2	☐	5.000	4.995	77035.55	0.0019	P	0.4
3	☐	500.000	501.264	7584740.03	0.1850	A	0.7
4	☐	1250.000	1259.412	18616054.72	0.4648	A	1.4
5	☐	2500.000	2517.836	36200335.30	0.9292	A	0.7
6	☐	5000.000	4874.755	70762022.28	1.7990	A	3.1
7	☐	10000.000	10056.924	143380936.75	3.7115	A	0.2
8	☐			32796.83	0.0009	P	7.6

$$y = 3.6905E-004 * x + 9.4545E-006$$

R = 0.9999

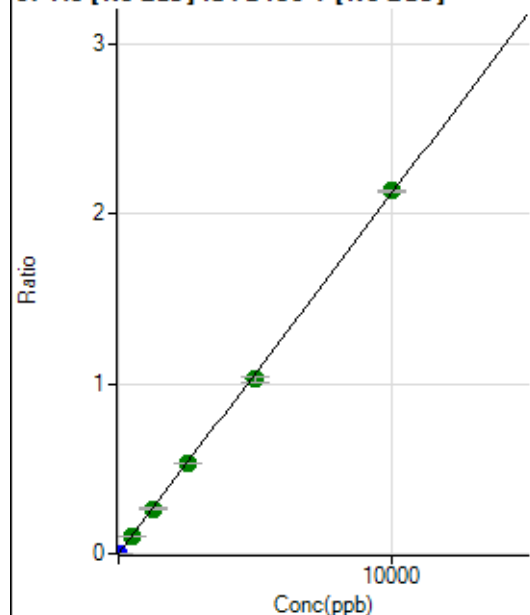
DL = 0.002948

BEC = 0.02562

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	78.89	0.0000	P	24.
2	☐	5.000	4.875	42990.83	0.0010	P	1.4
3	☐	500.000	501.709	4355312.51	0.1062	A	0.8
4	☐	1250.000	1253.621	10631529.29	0.2654	A	1.0
5	☐	2500.000	2501.184	20631574.14	0.5296	A	0.5
6	☐	5000.000	4853.281	40418613.56	1.0276	A	3.1
7	☐	10000.000	10072.525	82389208.22	2.1327	A	0.6
8	☐			8100.09	0.0002	P	8.8

$$y = 2.1173E-004 * x + 1.9458E-006$$

R = 0.9998

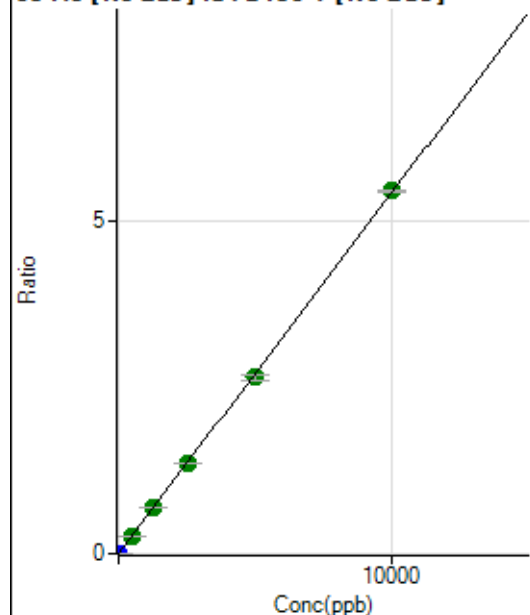
DL = 0.006639

BEC = 0.00919

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	140.00	0.0000	P	19.
2	☐	5.000	4.918	111296.56	0.0027	P	0.8
3	☐	500.000	497.638	11091394.14	0.2705	A	1.1
4	☐	1250.000	1259.568	27425431.53	0.6847	A	1.0
5	☐	2500.000	2502.205	52991674.77	1.3602	A	0.7
6	☐	5000.000	4880.332	104350574.00	2.6530	A	3.2
7	☐	10000.000	10058.205	211227070.19	5.4678	A	0.5
8	☐			20000.45	0.0006	P	9.7

$$y = 5.4362\text{E-}004 * x + 3.4533\text{E-}006$$

$$R = 0.9999$$

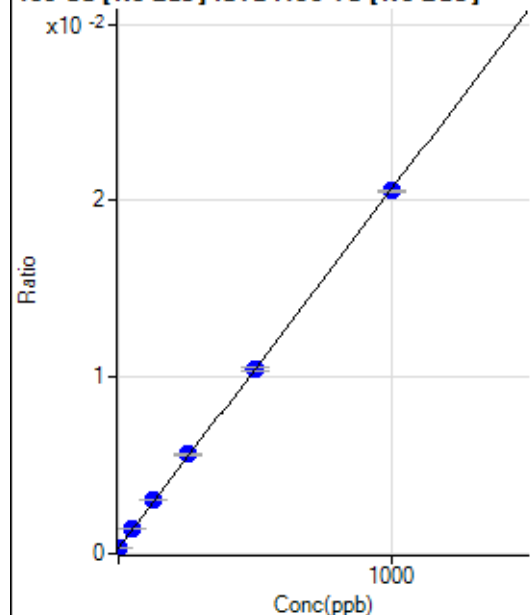
$$DL = 0.003618$$

$$BEC = 0.006352$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD:159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	10324.88	0.0003	P	1.7
2	☐	1.000	1.012	11257.78	0.0003	P	3.5
3	☐	50.000	54.877	47792.85	0.0014	P	0.7
4	☐	125.000	133.922	101557.28	0.0030	P	1.9
5	☐	250.000	260.831	185299.21	0.0056	P	0.9
6	☐	500.000	500.241	347011.61	0.0105	P	2.3
7	☐	1000.000	995.813	681438.98	0.0205	P	0.4
8	☐			9085.14	0.0003	P	2.1

$$y = 2.0318\text{E-}005 * x + 3.1657\text{E-}004$$

$$R = 0.9999$$

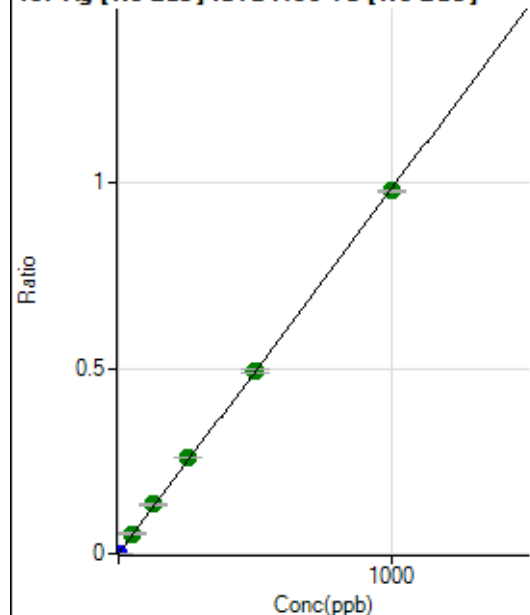
$$DL = 0.7835$$

$$BEC = 15.58$$

Weight: <None>

Min Conc: 0

107 Ag [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	405.57	0.0000	P	5.6
2	☐	1.000	1.083	36033.53	0.0011	P	0.0
3	☐	50.000	55.274	1817320.08	0.0544	A	0.8
4	☐	125.000	135.076	4447088.65	0.1330	A	1.5
5	☐	250.000	263.001	8544292.65	0.2590	A	0.6
6	☐	500.000	501.041	16336532.26	0.4934	A	1.2
7	☐	1000.000	994.706	32477883.13	0.9794	A	0.6
8	☐			2490.24	0.0001	P	10.

$$y = 9.8463\text{E-}004 * x + 1.2433\text{E-}005$$

$$R = 0.9999$$

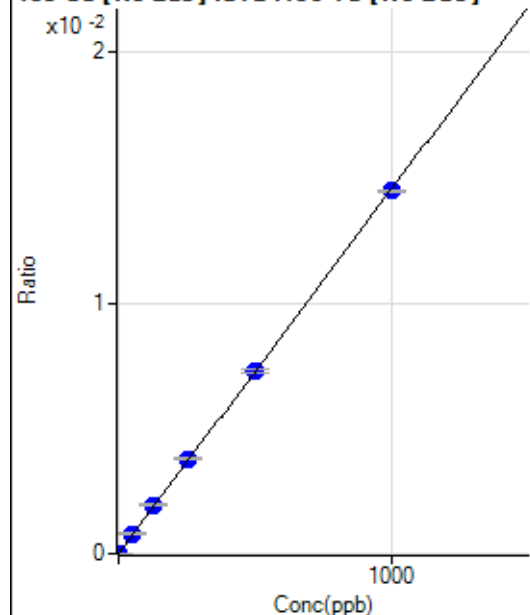
$$DL = 0.002117$$

$$BEC = 0.01263$$

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	40.00	0.0000	P	30.
2	☐	1.000	1.043	547.79	0.0000	P	6.4
3	☐	50.000	55.023	26774.80	0.0008	P	2.0
4	☐	125.000	133.613	65046.09	0.0019	P	1.9
5	☐	250.000	261.039	125372.57	0.0038	P	0.9
6	☐	500.000	501.311	241590.76	0.0073	P	2.2
7	☐	1000.000	995.257	480311.56	0.0145	P	0.7
8	☐			210.00	0.0000	P	15.

$$y = 1.4552\text{E-}005 * x + 1.2265\text{E-}006$$

$$R = 0.9999$$

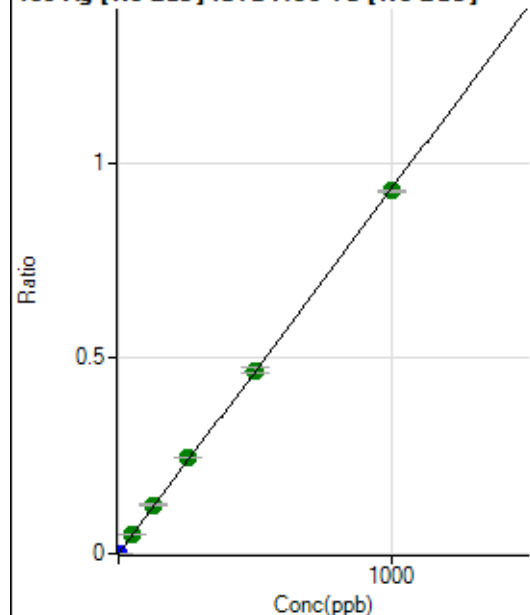
$$DL = 0.0758$$

$$BEC = 0.08428$$

Weight: <None>

Min Conc: 0

109 Ag [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	262.23	0.0000	P	6.3
2	☐	1.000	1.080	33953.03	0.0010	P	0.5
3	☐	50.000	54.686	1704426.99	0.0511	A	1.2
4	☐	125.000	133.607	4170165.95	0.1247	A	1.2
5	☐	250.000	261.887	8065977.87	0.2445	A	0.5
6	☐	500.000	502.952	15544661.16	0.4695	A	2.4
7	☐	1000.000	994.242	30775957.60	0.9281	A	0.5
8	☐			2274.65	0.0001	P	14.

$$y = 9.3346\text{E-}004 * x + 8.0420\text{E-}006$$

$$R = 0.9999$$

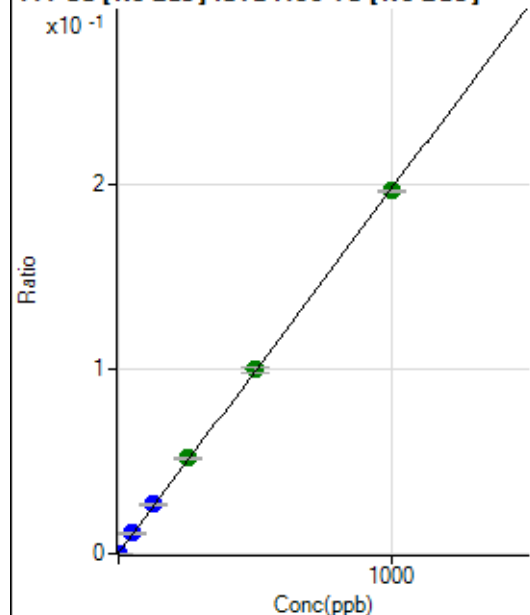
$$DL = 0.001621$$

$$BEC = 0.008615$$

Weight: <None>

Min Conc: 0

111 Cd [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7277.19	0.0002	P	1.8
2	☐	1.000	1.113	14801.11	0.0004	P	2.3
3	☐	50.000	54.501	367151.29	0.0110	P	1.3
4	☐	125.000	133.475	889735.54	0.0266	P	0.4
5	☐	250.000	260.559	1706848.73	0.0517	A	0.6
6	☐	500.000	503.802	3304816.97	0.0998	A	2.8
7	☐	1000.000	994.175	6524628.89	0.1968	A	0.8
8	☐			6890.40	0.0002	P	2.7

$$y = 1.9769\text{E-}004 * x + 2.2312\text{E-}004$$

$$R = 0.9999$$

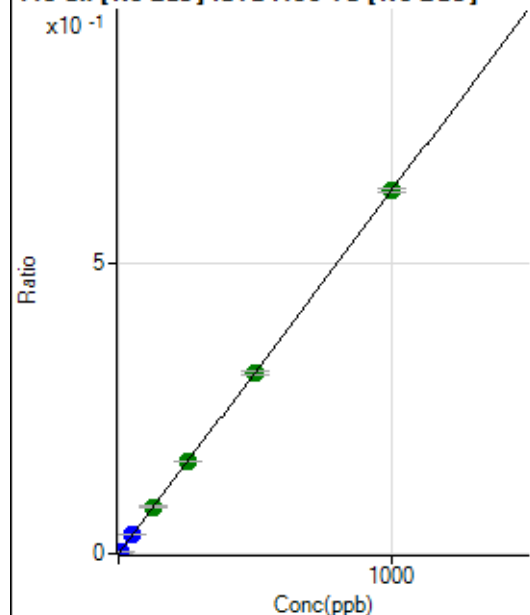
$$DL = 0.06106$$

$$BEC = 1.129$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD : 159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4198.45	0.0001	P	2.6
2	☐	5.000	5.269	114268.61	0.0034	P	0.8
3	☐	50.000	52.598	1101717.00	0.0330	P	1.5
4	☐	125.000	129.192	2703679.06	0.0809	A	1.3
5	☐	250.000	255.841	5279422.56	0.1600	A	0.7
6	☐	500.000	496.475	10277367.07	0.3104	A	2.1
7	☐	1000.000	999.647	20720388.72	0.6249	A	1.1
8	☐			14785.55	0.0005	P	11.

$$y = 6.2494\text{E-}004 * x + 1.2874\text{E-}004$$

$$R = 1.0000$$

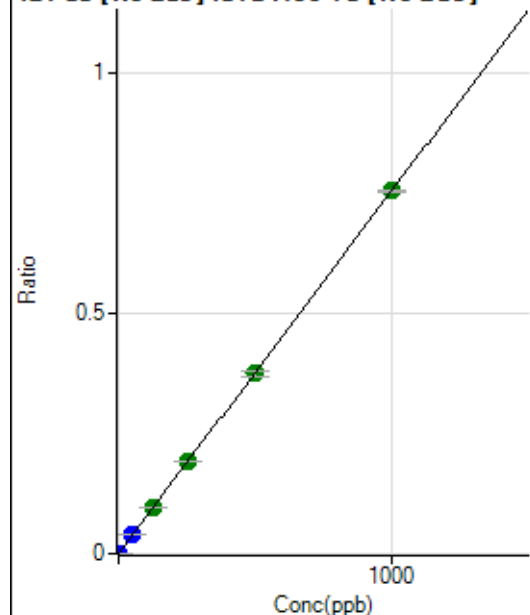
$$DL = 0.01625$$

$$BEC = 0.206$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD : 159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	82.22	0.0000	P	18.
2	☐	2.000	2.123	53533.51	0.0016	P	1.7
3	☐	50.000	51.889	1306249.67	0.0391	P	1.7
4	☐	125.000	128.840	3248052.38	0.0971	A	1.1
5	☐	250.000	253.633	6309627.61	0.1912	A	0.7
6	☐	500.000	495.907	12379119.96	0.3739	A	2.9
7	☐	1000.000	1000.564	25016183.80	0.7544	A	0.3
8	☐			14134.93	0.0005	P	6.7

$$y = 7.5398\text{E-}004 * x + 2.5217\text{E-}006$$

$$R = 1.0000$$

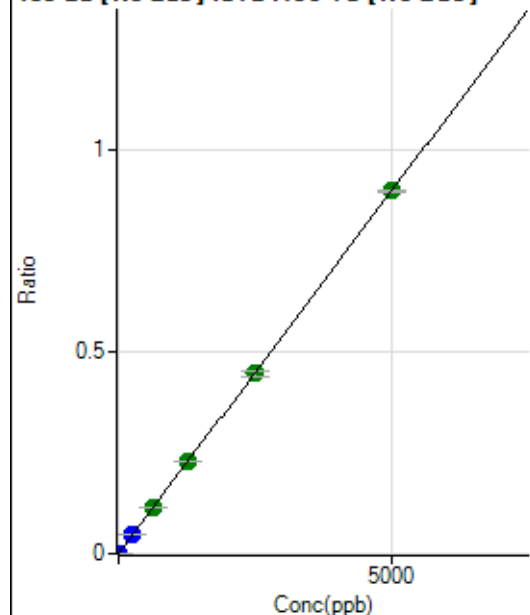
$$DL = 0.001846$$

$$BEC = 0.003344$$

Weight: <None>

Min Conc: 0

135 Ba [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	245.56	0.0000	P	11.
2	☐	10.000	10.181	61318.05	0.0018	P	1.5
3	☐	250.000	256.647	1539139.04	0.0461	P	0.8
4	☐	625.000	643.114	3862260.74	0.1155	A	0.9
5	☐	1250.000	1268.645	7518081.62	0.2279	A	0.4
6	☐	2500.000	2481.238	14755310.89	0.4457	A	2.5
7	☐	5000.000	5002.123	29791641.22	0.8984	A	0.7
8	☐			10301.59	0.0003	P	10.

$$y = 1.7961\text{E-}004 * x + 7.5262\text{E-}006$$

$$R = 1.0000$$

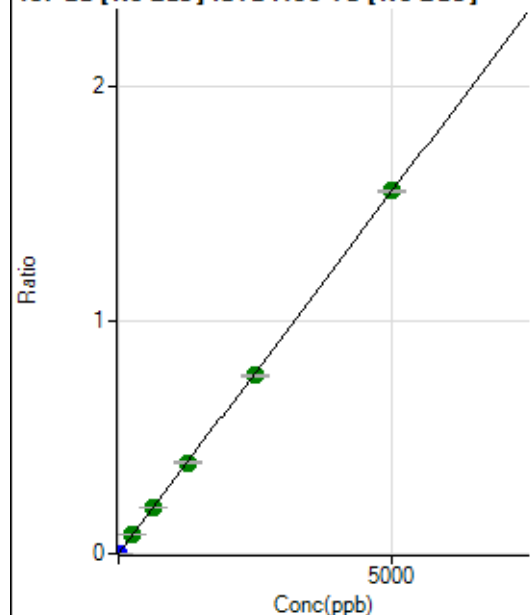
$$DL = 0.01407$$

$$BEC = 0.0419$$

Weight: <None>

Min Conc: 0

137 Ba [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	403.34	0.0000	P	0.3
2	☐	10.000	10.264	106632.50	0.0032	P	1.0
3	☐	250.000	256.968	2658795.01	0.0796	A	3.0
4	☐	625.000	636.895	6598489.90	0.1974	A	1.3
5	☐	1250.000	1262.031	12902689.67	0.3911	A	0.7
6	☐	2500.000	2460.967	25249699.62	0.7626	A	1.8
7	☐	5000.000	5014.673	51526015.34	1.5538	A	0.6
8	☐			18044.85	0.0006	P	10.

$$y = 3.0986\text{E-}004 * x + 1.2367\text{E-}005$$

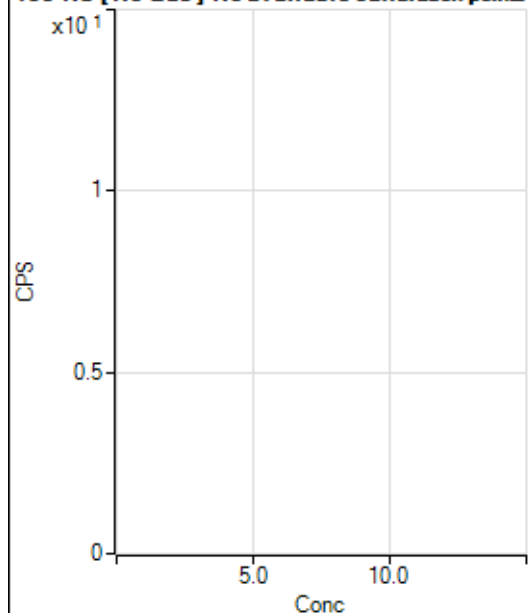
$$R = 0.9999$$

$$DL = 0.0003793$$

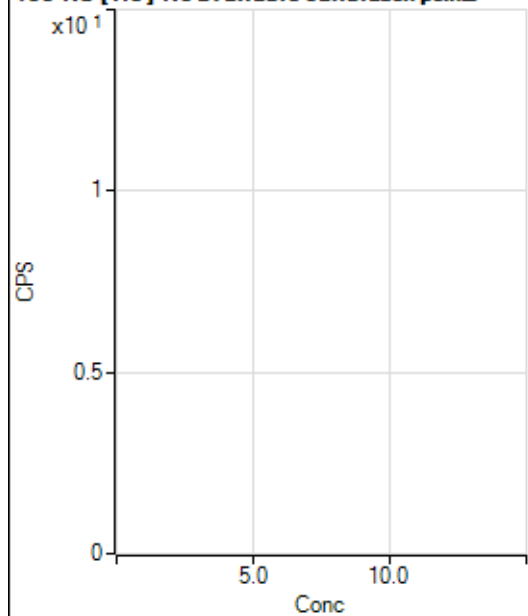
$$BEC = 0.03991$$

Weight: <None>

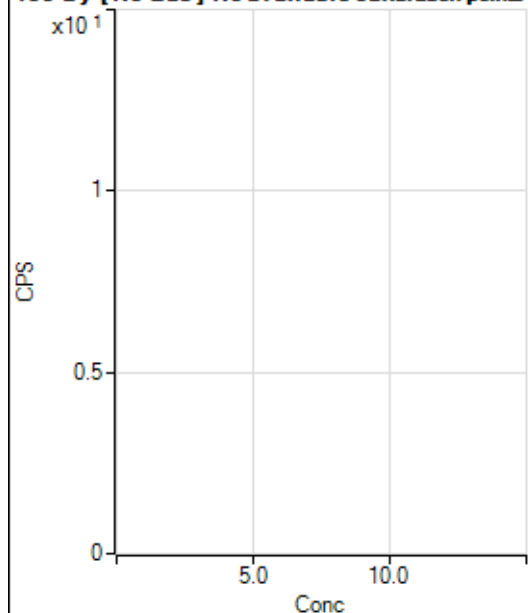
Min Conc: 0

150 Nd [No Gas] No available calibration points

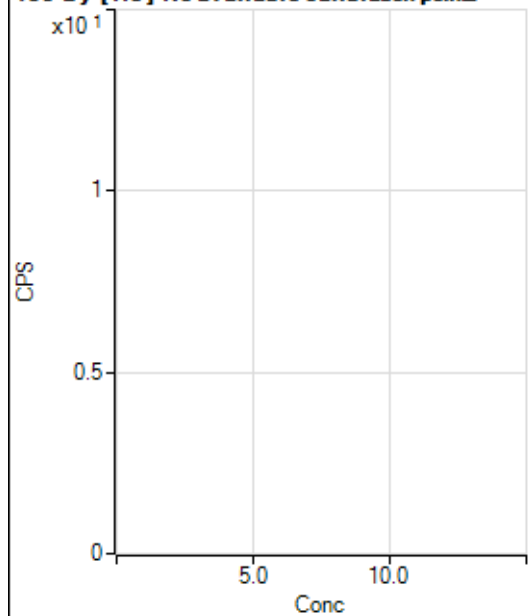
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			31.11		P	22.
2	☐			27.78		P	25.
3	☐			97.78		P	18.
4	☐			195.56		P	7.7
5	☐			393.34		P	10.
6	☐			565.57		P	11.
7	☐			1224.51		P	7.8
8	☐			463.35		P	5.7

150 Nd [He] No available calibration points

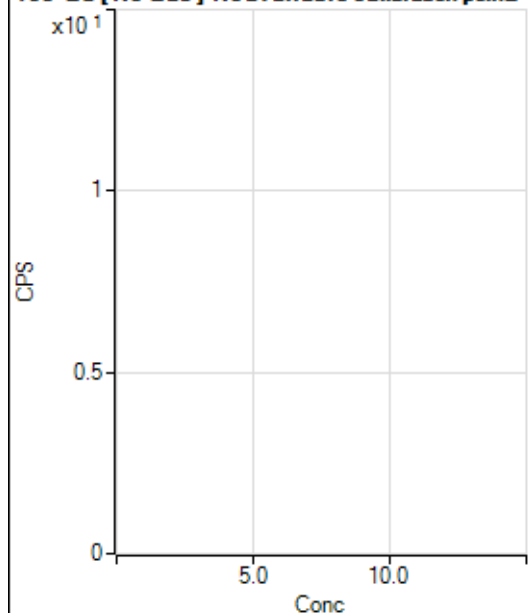
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	66.
2	☐			12.22		P	56.
3	☐			26.67		P	0.0
4	☐			62.22		P	6.2
5	☐			72.22		P	16.
6	☐			123.34		P	18.
7	☐			280.01		P	13.
8	☐			301.12		P	7.5

156 Dy [No Gas] No available calibration points

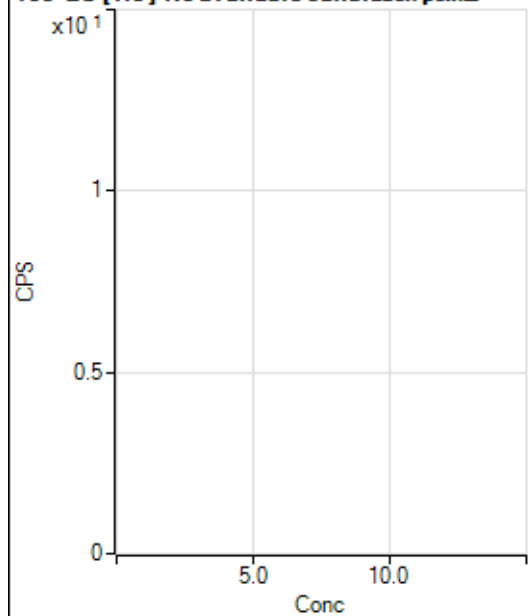
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.33		P	10.
2	☐			58.89		P	21.
3	☐			82.22		P	6.2
4	☐			86.67		P	0.0
5	☐			141.11		P	12.
6	☐			262.23		P	12.
7	☐			451.12		P	11.
8	☐			745.58		P	10.

156 Dy [He] No available calibration points

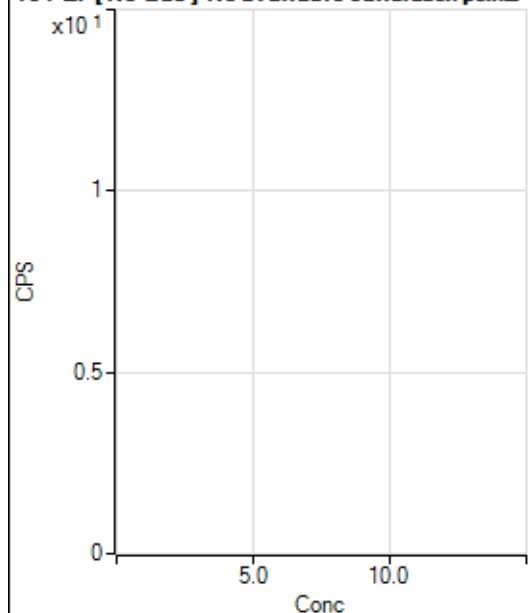
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.45		P	43.
2	☐			24.44		P	31.
3	☐			86.67		P	11.
4	☐			177.78		P	7.8
5	☐			328.90		P	3.1
6	☐			667.80		P	5.8
7	☐			1266.74		P	3.4
8	☐			665.58		P	7.8

160 Gd [No Gas] Noavailable calibration poin...

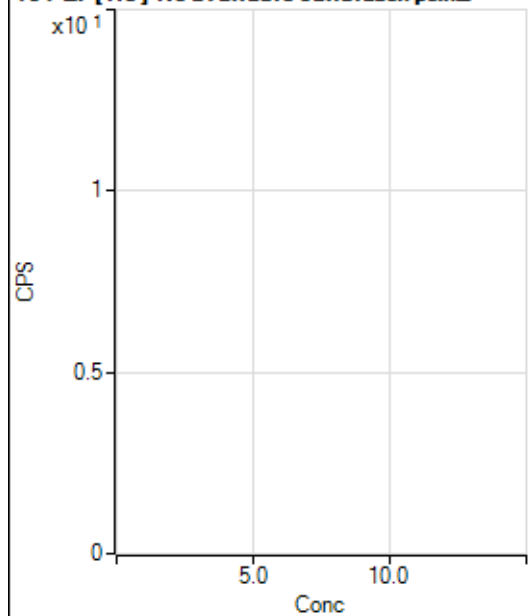
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			151.11		P	6.4
2	☐			174.45		P	14.
3	☐			173.34		P	5.1
4	☐			195.56		P	5.2
5	☐			211.11		P	11.
6	☐			272.23		P	13.
7	☐			341.12		P	4.4
8	☐			791.14		P	8.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1195.62		P	6.8
2	☐			1258.96		P	7.6
3	☐			1131.17		P	13.
4	☐			1140.05		P	3.3
5	☐			1140.06		P	1.5
6	☐			1112.28		P	4.0
7	☐			1267.85		P	3.4
8	☐			1472.32		P	7.7

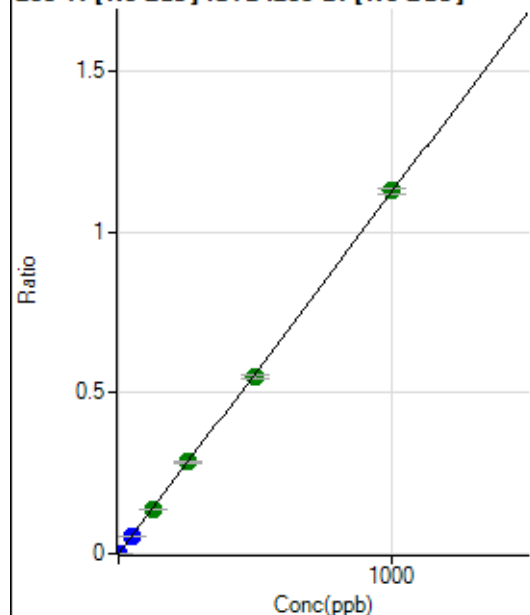
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			123.34		P	2.7
2	☐			156.67		P	17.
3	☐			166.67		P	12.
4	☐			165.56		P	37.
5	☐			187.78		P	5.4
6	☐			261.12		P	8.3
7	☐			412.23		P	6.1
8	☐			877.81		P	6.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			93.34		P	25.
2	☐			103.33		P	22.
3	☐			104.45		P	10.
4	☐			126.67		P	2.6
5	☐			132.23		P	28.
6	☐			167.78		P	3.0
7	☐			262.23		P	9.5
8	☐			608.91		P	8.5

203 Tl [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	254.45	0.0000	P	0.7
2	☐	1.000	0.995	20582.28	0.0011	P	0.9
3	☐	50.000	49.446	1027086.66	0.0556	P	1.7
4	☐	125.000	124.038	2585969.39	0.1395	A	0.9
5	☐	250.000	253.010	5137866.97	0.2844	A	0.5
6	☐	500.000	489.074	10026350.68	0.5498	A	2.5
7	☐	1000.000	1004.858	20136083.59	1.1297	A	1.6
8	☐			1621.23	0.0001	P	23.

$$y = 0.0011 * x + 1.4513E-005$$

$$R = 0.9999$$

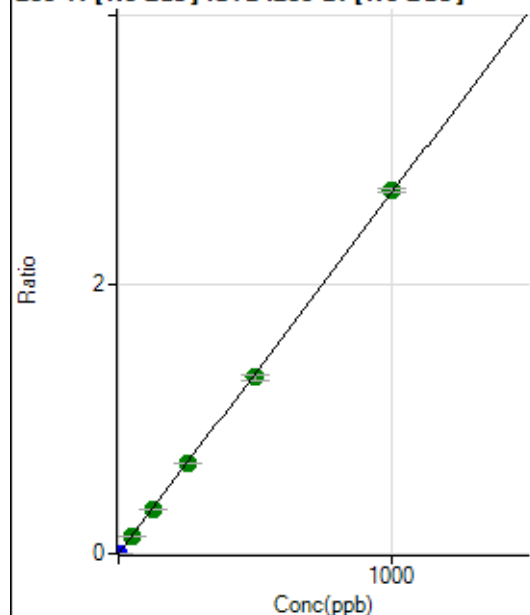
$$DL = 0.000274$$

$$BEC = 0.01291$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	505.57	0.0000	P	8.2
2	☐	1.000	0.972	47925.22	0.0026	P	0.7
3	☐	50.000	49.628	2462255.85	0.1333	A	2.3
4	☐	125.000	123.983	6174104.35	0.3330	A	0.5
5	☐	250.000	251.904	12218420.51	0.6764	A	0.7
6	☐	500.000	488.403	23912937.14	1.3115	A	3.2
7	☐	1000.000	1005.468	48128919.84	2.6999	A	1.2
8	☐			3792.81	0.0003	P	28.

$$y = 0.0027 * x + 2.8837E-005$$

$$R = 0.9999$$

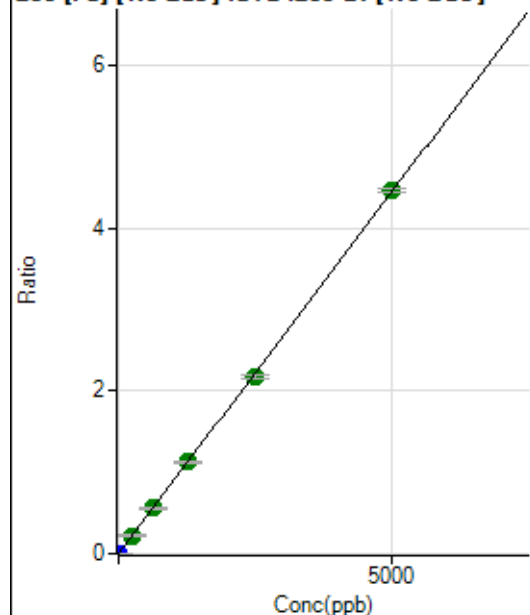
$$DL = 0.002626$$

$$BEC = 0.01074$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1380.09	0.0001	P	5.2
2	☐	1.000	0.995	17475.76	0.0010	P	1.3
3	☐	250.000	251.011	4118502.99	0.2230	A	1.8
4	☐	625.000	625.432	10298910.40	0.5554	A	0.8
5	☐	1250.000	1266.170	20308438.72	1.1243	A	0.5
6	☐	2500.000	2455.029	39749671.08	2.1799	A	2.5
7	☐	5000.000	5018.339	79427438.81	4.4558	A	1.2
8	☐			11127.98	0.0007	P	10.

$$y = 8.8790E-004 * x + 7.8716E-005$$

$$R = 0.9999$$

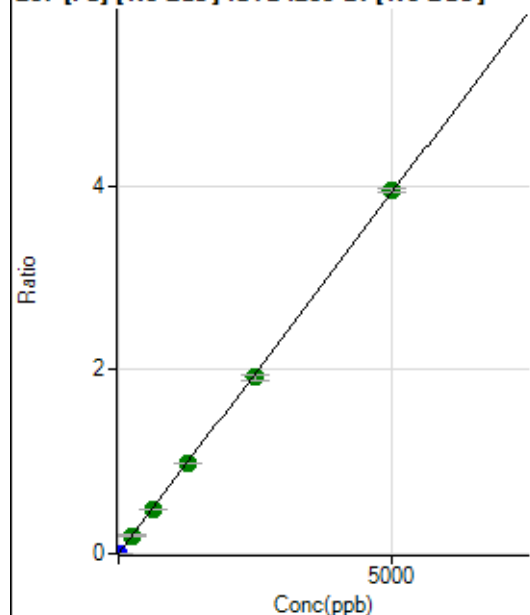
$$DL = 0.01378$$

$$BEC = 0.08865$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1184.51	0.0001	P	9.4
2	☐	1.000	0.977	15166.36	0.0008	P	0.9
3	☐	250.000	250.434	3635142.51	0.1968	A	2.8
4	☐	625.000	619.045	9018025.70	0.4863	A	0.5
5	☐	1250.000	1258.096	17850461.68	0.9883	A	1.0
6	☐	2500.000	2440.141	34952302.26	1.9168	A	2.4
7	☐	5000.000	5028.629	70410904.50	3.9500	A	1.2
8	☐			9637.93	0.0006	P	10.

$$y = 7.8548E-004 * x + 6.7564E-005$$

$$R = 0.9999$$

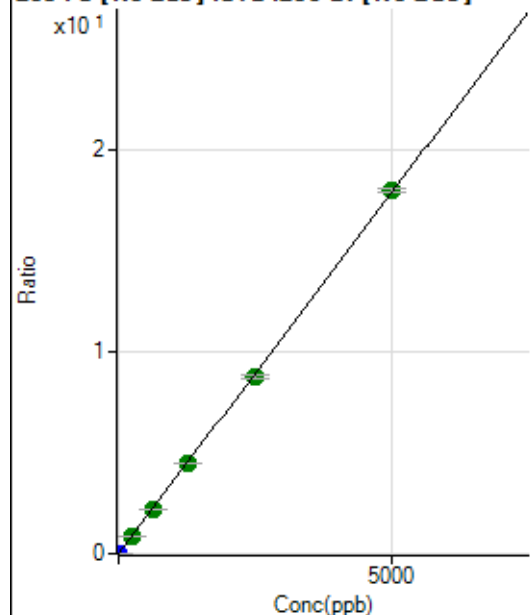
$$DL = 0.02435$$

$$BEC = 0.08602$$

Weight: <None>

Min Conc: 0

208 Pb [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5449.38	0.0003	P	3.4
2	☐	1.000	0.988	69704.81	0.0038	P	0.5
3	☐	250.000	249.367	16456608.64	0.00909	A	2.2
4	☐	625.000	620.804	41117434.24	0.022173	A	0.3
5	☐	1250.000	1259.409	81244945.59	0.044979	A	0.6
6	☐	2500.000	2445.221	159238442.63	0.087327	A	2.5
7	☐	5000.000	5025.593	319926870.78	0.179477	A	1.2
8	☐			44398.76	0.0029	P	10.

$$y = 0.0036 * x + 3.1083E-004$$

$$R = 0.9999$$

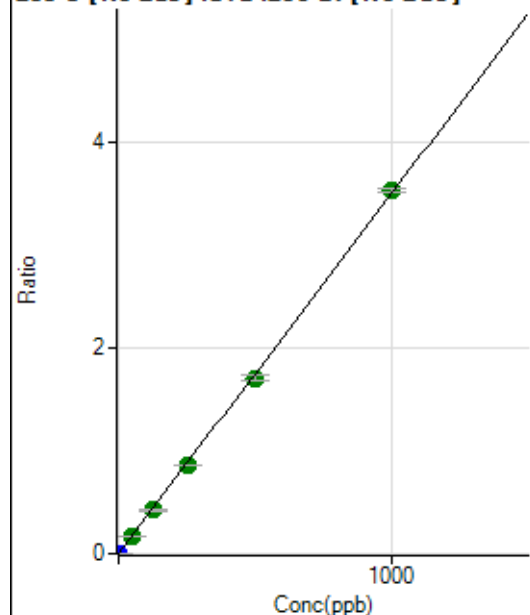
$$DL = 0.008773$$

$$BEC = 0.08704$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26.67	0.0000	P	12.
2	☐	1.000	0.927	58803.42	0.0032	P	0.9
3	☐	50.000	47.641	3073275.79	0.01664	A	1.7
4	☐	125.000	120.385	7795671.27	0.04204	A	1.1
5	☐	250.000	246.925	15576704.07	0.08623	A	0.7
6	☐	500.000	487.489	31039065.65	0.17024	A	3.3
7	☐	1000.000	1007.719	62730592.95	0.35191	A	1.0
8	☐			1391.20	0.0001	P	31.

$$y = 0.0035 * x + 1.5210E-006$$

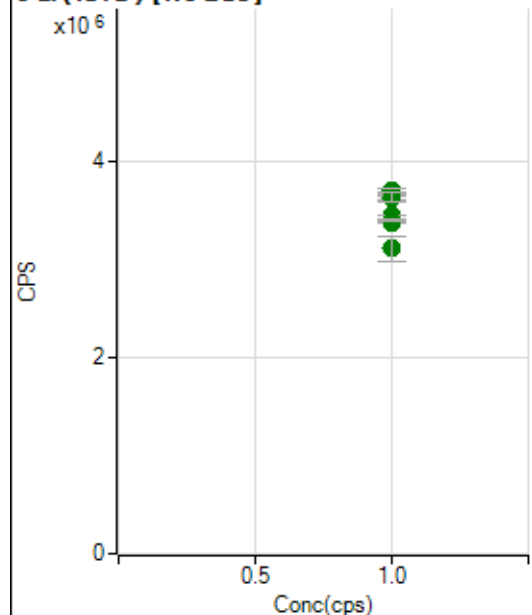
$$R = 0.9999$$

$$DL = 0.0001634$$

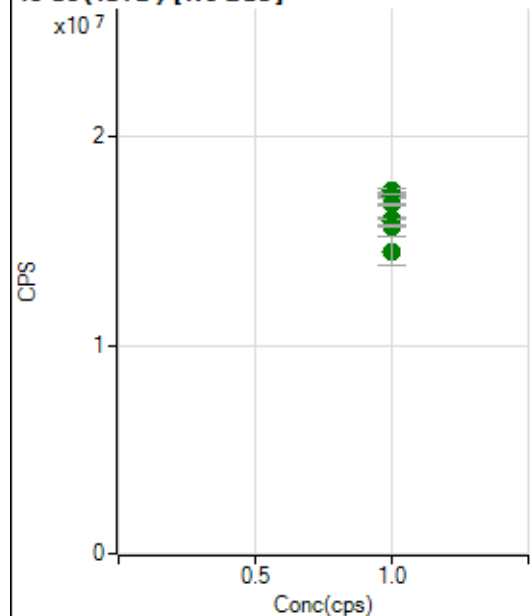
$$BEC = 0.0004356$$

Weight: <None>

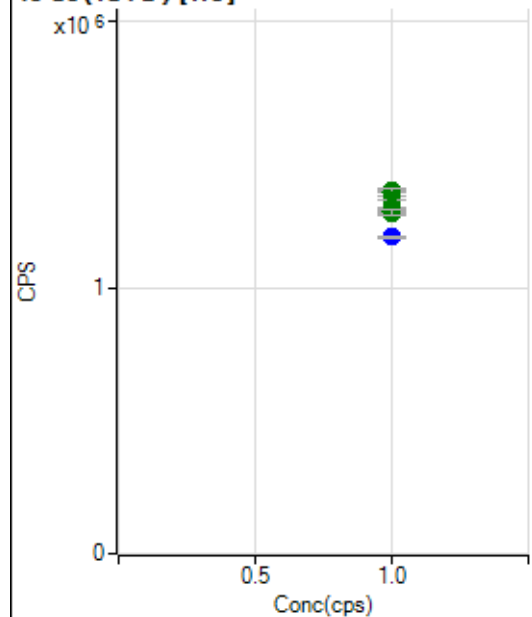
Min Conc: 0

6 Li (ISTD) [No Gas]

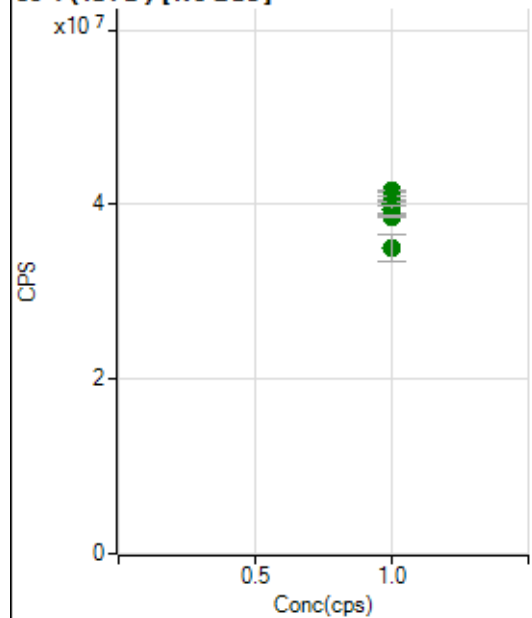
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3366966.60		A	0.4
2	☐	1.000		3443256.01		A	0.2
3	☐	1.000		3653066.40		A	0.8
4	☐	1.000		3695244.24		A	1.2
5	☐	1.000		3618157.55		A	1.3
6	☐	1.000		3629149.36		A	2.6
7	☐	1.000		3396659.10		A	1.0
8	☐	1.000		3109329.09		A	8.5

45 Sc (ISTD) [No Gas]

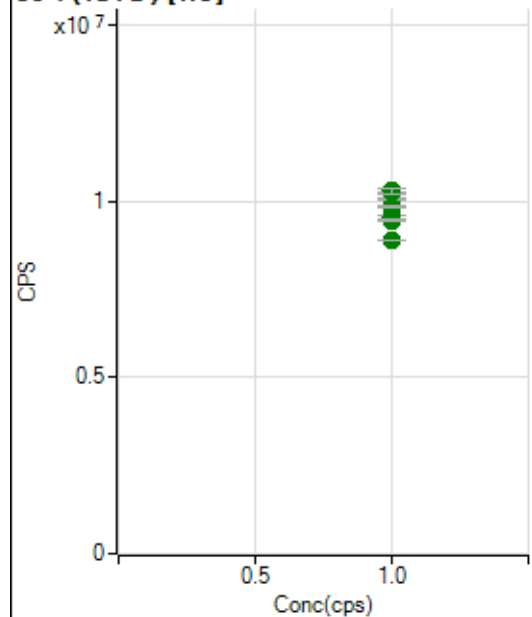
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		17170961.41		A	0.4
2	☐	1.000		17418546.96		A	0.9
3	☐	1.000		17159689.47		A	0.9
4	☐	1.000		16761159.33		A	0.5
5	☐	1.000		16101343.09		A	0.2
6	☐	1.000		15927251.71		A	1.5
7	☐	1.000		15738721.29		A	0.9
8	☐	1.000		14516186.73		A	9.5

45 Sc (ISTD) [He]

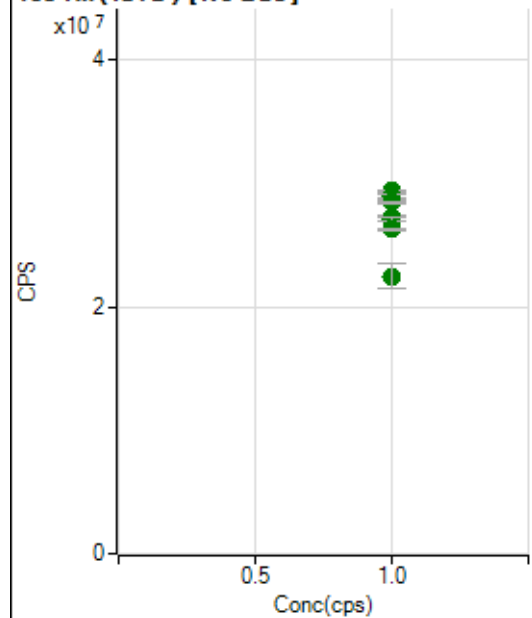
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1358284.02		A	2.1
2	☐	1.000		1363526.95		A	0.6
3	☐	1.000		1359465.71		A	2.1
4	☐	1.000		1328749.99		A	0.1
5	☐	1.000		1297311.22		A	0.6
6	☐	1.000		1282372.13		A	0.8
7	☐	1.000		1285048.24		A	1.6
8	☐	1.000		1190455.87		P	0.4

89 Y (ISTD) [No Gas]

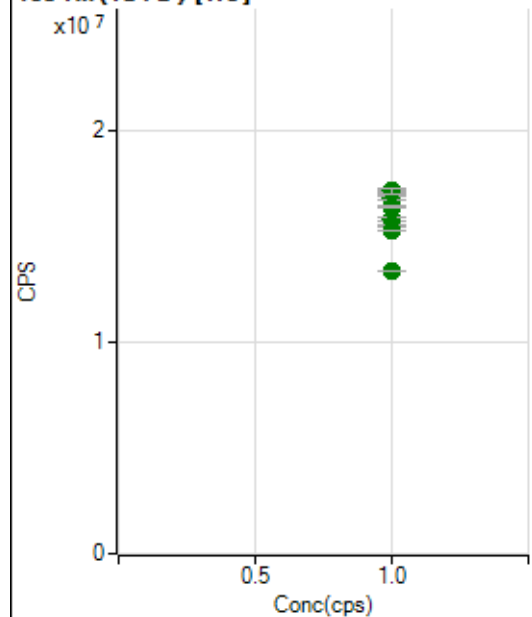
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		40546437.73		A	0.1
2	☐	1.000		41574925.49		A	0.8
3	☐	1.000		40998196.33		A	0.4
4	☐	1.000		40056121.35		A	1.1
5	☐	1.000		38957808.03		A	0.3
6	☐	1.000		39350971.64		A	2.2
7	☐	1.000		38631582.48		A	0.4
8	☐	1.000		35025970.86		A	8.4

89 Y (ISTD) [He]

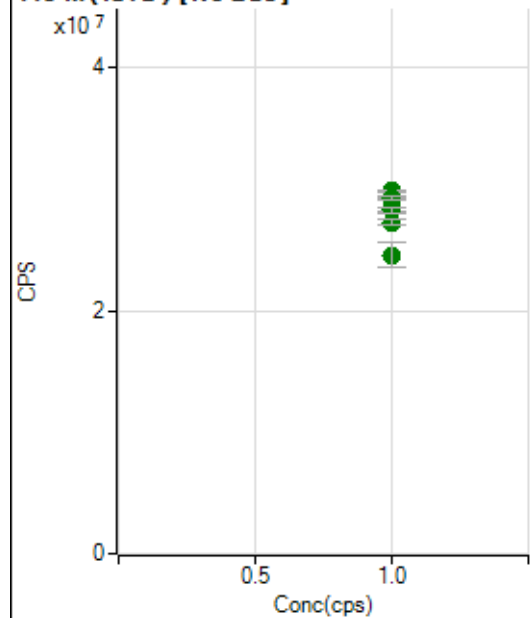
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10083661.72		A	0.8
2	☐	1.000		10264934.57		A	0.2
3	☐	1.000		10308873.74		A	1.5
4	☐	1.000		9862019.65		A	0.5
5	☐	1.000		9559199.23		A	1.2
6	☐	1.000		9494545.48		A	0.5
7	☐	1.000		9474255.00		A	0.3
8	☐	1.000		8909743.83		A	0.2

103 Rh (ISTD) [No Gas]

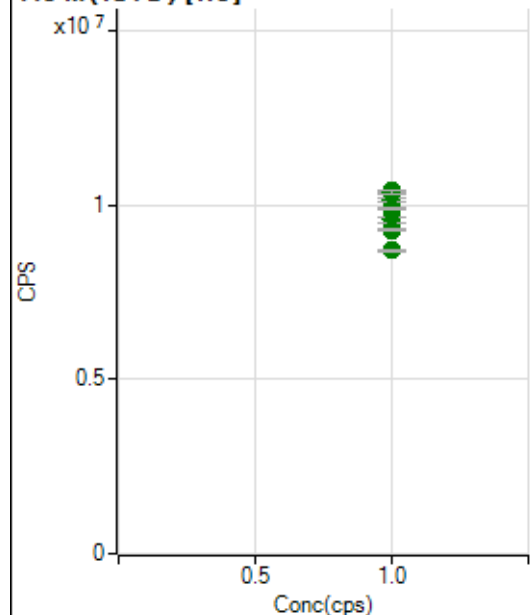
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		28729129.85		A	0.7
2	☐	1.000		29408045.67		A	0.3
3	☐	1.000		29004300.12		A	1.4
4	☐	1.000		28453808.74		A	0.5
5	☐	1.000		27320600.15		A	0.6
6	☐	1.000		27075736.26		A	1.3
7	☐	1.000		26311001.83		A	0.6
8	☐	1.000		22507708.28		A	8.5

103 Rh (ISTD) [He]

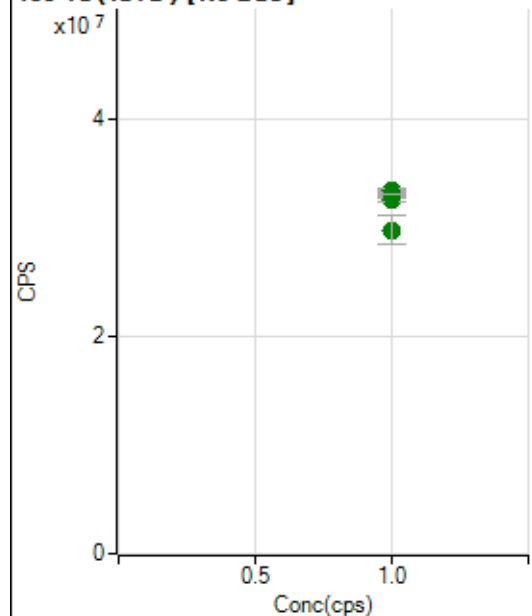
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		16868195.58		A	1.1
2	☐	1.000		17168337.80		A	0.4
3	☐	1.000		17179145.72		A	1.3
4	☐	1.000		16429927.39		A	0.3
5	☐	1.000		15859931.15		A	1.2
6	☐	1.000		15558121.99		A	0.5
7	☐	1.000		15294034.77		A	0.1
8	☐	1.000		13404800.91		A	0.4

115 In (ISTD) [No Gas]

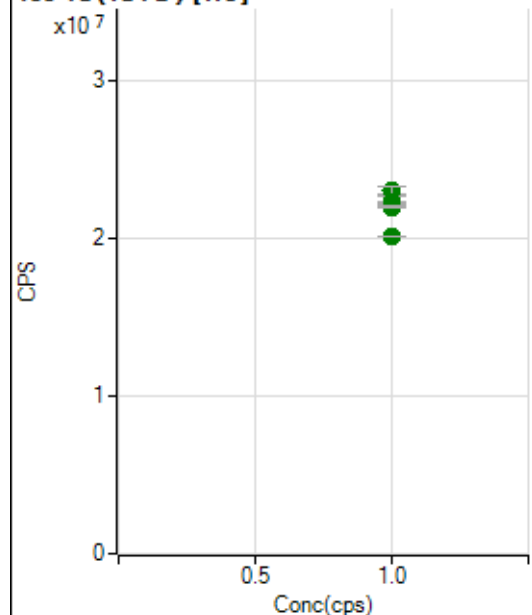
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		29169853.12		A	0.7
2	☐	1.000		29859019.52		A	0.6
3	☐	1.000		29764470.31		A	0.5
4	☐	1.000		29280770.27		A	0.7
5	☐	1.000		28374285.45		A	1.1
6	☐	1.000		28256910.31		A	1.3
7	☐	1.000		27255669.38		A	1.7
8	☐	1.000		24603588.58		A	8.5

115 In (ISTD) [He]

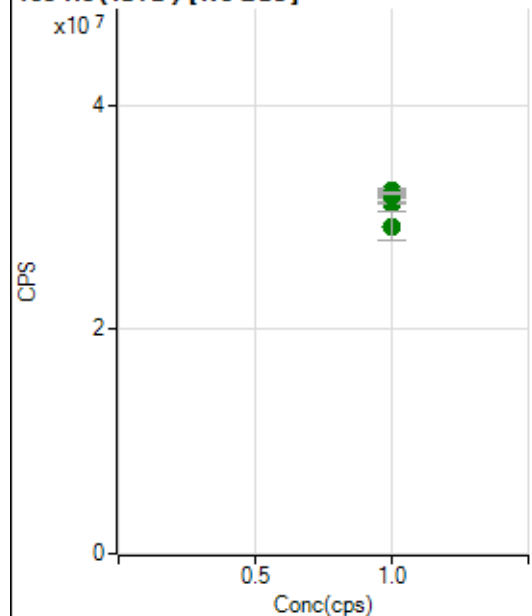
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10146925.54		A	1.2
2	☐	1.000		10417924.45		A	0.2
3	☐	1.000		10393558.29		A	1.2
4	☐	1.000		9897634.86		A	0.3
5	☐	1.000		9596251.55		A	1.6
6	☐	1.000		9479154.49		A	0.2
7	☐	1.000		9301601.19		A	0.2
8	☐	1.000		8707853.56		A	0.9

159 Tb (ISTD) [No Gas]

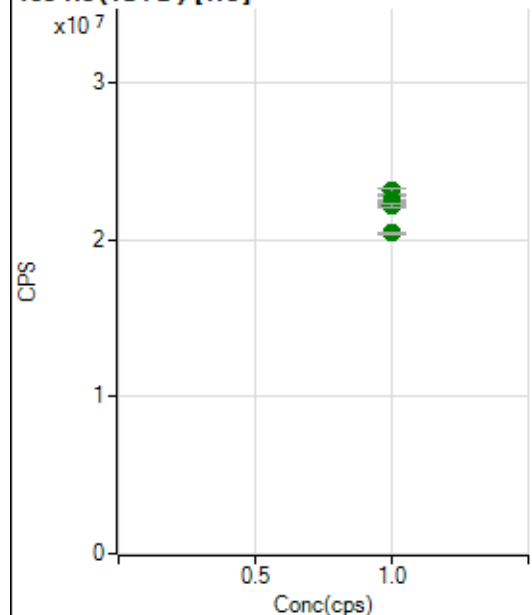
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		32614514.51		A	0.6
2	☐	1.000		33398048.39		A	0.6
3	☐	1.000		33384497.84		A	0.8
4	☐	1.000		33437905.06		A	1.4
5	☐	1.000		32993472.01		A	0.3
6	☐	1.000		33117506.17		A	1.5
7	☐	1.000		33160131.17		A	0.2
8	☐	1.000		29838905.67		A	9.1

159 Tb (ISTD) [He]

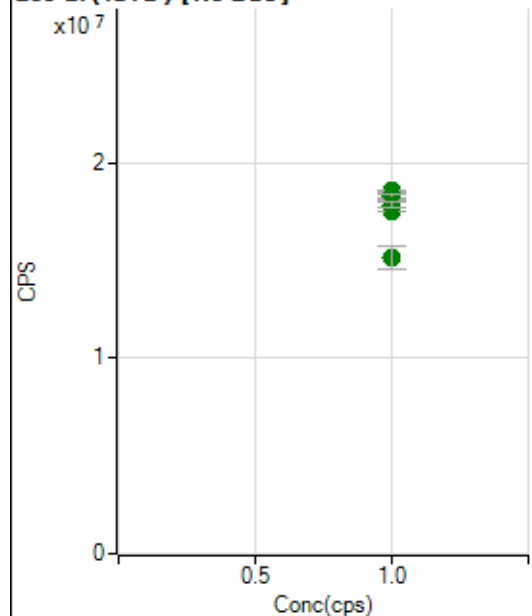
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22174435.23		A	0.9
2	☐	1.000		22818436.05		A	0.2
3	☐	1.000		23022435.21		A	2.5
4	☐	1.000		22330177.72		A	0.4
5	☐	1.000		22213415.78		A	0.4
6	☐	1.000		21986420.78		A	0.6
7	☐	1.000		21995921.90		A	0.5
8	☐	1.000		20118841.51		A	0.4

165 Ho (ISTD) [No Gas]

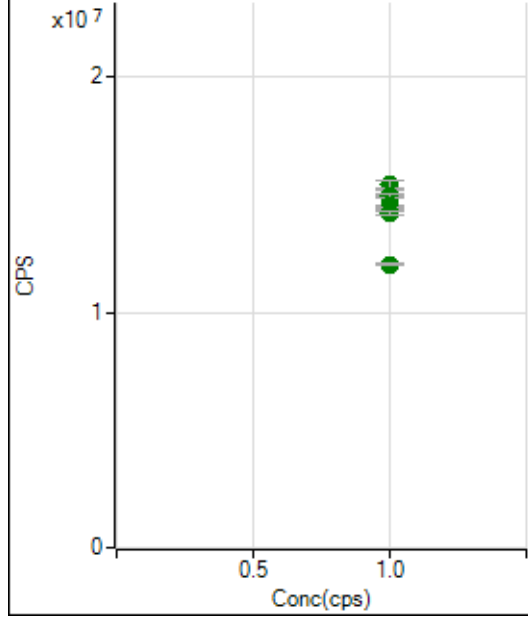
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		31278227.03		A	0.6
2	☐	1.000		31864344.52		A	0.6
3	☐	1.000		32277103.41		A	0.7
4	☐	1.000		32358159.24		A	0.8
5	☐	1.000		32026392.58		A	1.6
6	☐	1.000		32286760.63		A	1.8
7	☐	1.000		32107257.02		A	0.6
8	☐	1.000		29228618.73		A	8.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22398198.56		A	0.2
2	☐	1.000		22852139.10		A	0.7
3	☐	1.000		23135542.71		A	1.7
4	☐	1.000		22571970.77		A	0.4
5	☐	1.000		22262146.33		A	0.5
6	☐	1.000		22286241.89		A	0.6
7	☐	1.000		22193519.11		A	0.8
8	☐	1.000		20425508.45		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17532153.49		A	0.1
2	☐	1.000		18156492.65		A	0.3
3	☐	1.000		18471808.20		A	0.4
4	☐	1.000		18543679.17		A	0.4
5	☐	1.000		18063643.48		A	1.2
6	☐	1.000		18240614.73		A	1.9
7	☐	1.000		17827496.54		A	1.5
8	☐	1.000		15159384.36		A	8.0

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14894558.39		A	0.9
2	☐	1.000		15242507.41		A	0.6
3	☐	1.000		15402426.99		A	2.0
4	☐	1.000		14931784.22		A	1.0
5	☐	1.000		14546297.56		A	0.3
6	☐	1.000		14423777.01		A	0.9
7	☐	1.000		14240805.07		A	1.1
8	☐	1.000		12030993.85		A	0.4

US EPA Tune Check Report

Operator Name

Jaswal

Acq/Data Batch

D:\Agilent\ICPMH\1\DATA\P7111324MS5.b

Acq. Date-Time

2024-11-13 15:27:01

Report Comment

Instrument Name

G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		31543	315427.46			0.156	5.000
24		192944	1929437.00			0.709	5.000
25		24425	244245.96			0.160	5.000
26		29767	297670.09			0.187	5.000
59		246644	2466442.06			0.974	5.000
113		31270	312700.02			0.596	5.000
115		384137	3841369.80			0.477	5.000
206		68320	683203.78			0.279	5.000
207		59418	594176.95			0.537	5.000
208		144985	1449853.35			0.781	5.000
220		0	3.50			40.406	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

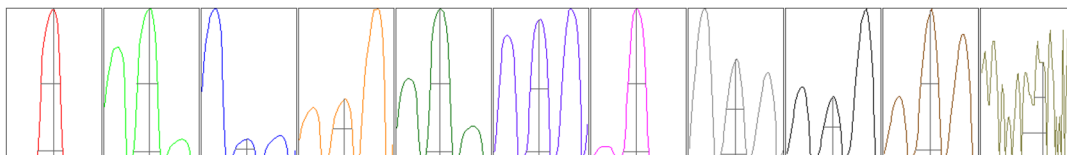
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	31533	31569	31611	31518	31483
24	194608	192450	191788	191685	194187
25	24380	24442	24389	24437	24474
26	29732	29734	29727	29857	29786
59	250098	245789	244310	248082	244942
113	31566	31238	31273	31222	31051
115	386870	384017	384055	384045	381698
206	68560	68098	68433	68161	68349
207	59945	59126	59325	59458	59235
208	146942	144985	144237	144305	144457

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	54990.44	9.00	8.90 - 9.10	
24	319529.34	23.95	23.90 - 24.10	
25	41751.79	24.95	24.90 - 25.10	
26	49088.64	25.95	25.90 - 26.10	
59	413954.15	58.90	58.90 - 59.10	
113	56877.99	112.95	112.90 - 113.10	
115	707545.02	114.95	114.90 - 115.10	
206	131974.01	206.00	205.90 - 206.10	
207	114763.84	207.00	206.90 - 207.10	
208	272904.72	208.00	207.90 - 208.10	
220	0.45	220.50	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.778	0.900	
24	0.64	0.834	0.900	
25	0.62	0.772	0.900	
26	0.62	0.783	0.900	
59	0.62	0.825	0.900	
113	0.56	0.752	0.900	
115	0.55	0.800	0.900	
206	0.53	0.808	0.900	
207	0.53	0.771	0.900	
208	0.55	0.816	0.900	
220	0.35	0.766		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.82 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	15.4 V
Extract 2	-155.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-70 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	136	Axis Gain	0.9979	QP Bias	-3.0 V
Mass Offset	129	Axis Offset	0.09		

Hardware Settings

Torch

Torch H	0.0 mm	Torch V	0.5 mm
---------	--------	---------	--------

EM

Discriminator	4.7 mV	Analog HV	2209 V	Pulse HV	964 V
---------------	--------	-----------	--------	----------	-------

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		78108	781083.66			0.748	
89		117138	1171382.33			1.019	
205		76823	768231.91			0.757	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	79053	78257	77929	77669	77634
89	117501	117157	118788	115499	116747
205	77517	77243	76239	76231	76887

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.5 V	Deflect	3.8 V
-----------	-------	------------	-------	---------	-------

US EPA Tune Check Report

Extract 2	-175.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-75 V	Cell Exit	-60 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	136	Axis Gain	0.9979	QP Bias	-13.0 V
Mass Offset	129	Axis Offset	0.09		
Hardware Settings					
Torch					
Torch H	0.0 mm	Torch V	0.5 mm		
EM					
Discriminator	4.7 mV	Analog HV	2209 V	Pulse HV	964 V